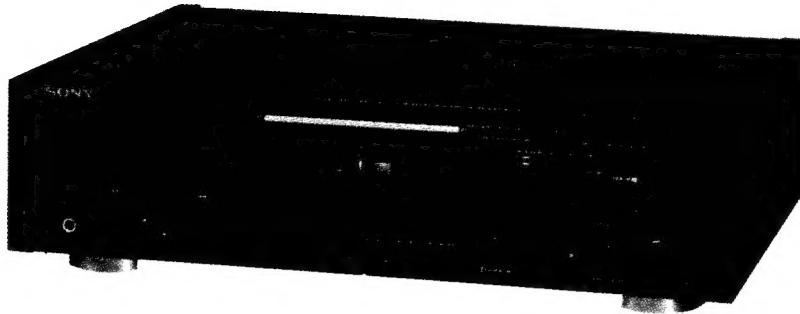


# TC-K333ESR / K730ES

## SERVICE MANUAL



*US Model  
Canadian Model  
AEP Model  
UK Model  
TC-K730ES  
E Model  
TC-K333ESR*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

This photo is TC-K333ESR

### SPECIFICATIONS

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	TCM-110D3

Recording system	4-track 2-channel stereo			
Bias frequency	210 kHz			
Heads	Erase head × 1 (S & F head) Record head × 1 (LA head) Playback head × 1 (LA head)			
Motors	Capstan motor × 1 (direct drive linear torque BSL motor) Reel motor × 1 (DC motor)			
Wow and flutter	±0.04% W.peak (IEC) 0.025% WRMS			
Fast-forward and rewind time	Approx. 90 sec (with C-60 cassette)			
Frequency response	Dolby NR OFF TYPE IV cassette (Sony METAL-ES) 20 – 21,000 Hz ±3 dB (DIN) 20 – 16,000 Hz ±3 dB (0 VU recording level) 15 – 22,000 Hz TYPE II cassette (Sony UX-S) 20 – 19,000 Hz ±3 dB (DIN) 15 – 20,000 Hz TYPE I cassette (Sony HF-S) 20 – 17,000 Hz ±3 dB (DIN) 15 – 19,000 Hz			
Signal-to-noise ratio (at peak level)	Cassette Dolby NR system C-TYPE ON B-TYPE ON OFF	TYPE I (Sony HF-S) 72 dB 63 dB 56 dB	TYPE II (Sony UX-S) 73 dB 66 dB 59 dB	TYPE IV (Sony METAL-ES) 69 dB 67 dB 60 dB

Total harmonic distortion	0.8% (with Sony METAL-ES cassette)
Inputs	Line inputs (phono jacks) Sensitivity 77.5 mV Input impedance 50 k ohms
Outputs	Line outputs (phono jacks) Rated output level 0.44 V (-5 dB) at load impedance 47 k ohms Minimum load impedance 10 k ohms Headphones output (stereo phone jack) Output level continuously variable from 0 – 3 mW (at load impedance 32 ohms)

### General

Power requirements	US, Canadian model: 120V AC, 60Hz UK model: 240V AC, 50Hz (220V AC adjustable by authorized Sony personnel) AEP model: 220V AC, 50/60 Hz (240V AC adjustable by authorized Sony personnel) E model: 120, 220 or 240V AC adjustable, 50/60Hz
Power consumption	30 watts
Dimensions	Approx. 470 × 125 × 350 mm (w/h/d) (18 5/8 × 5 × 13 1/4 inches)
Weight	Approx. 9.5 kg (22 lb)
Supplied accessories	Connecting cord (2) Screws (8)

— continued on next page —

**STEREO CASSETTE DECK**  
**SONY®**



**Peak program meters**

Display range	-40 to +8 dB
Frequency response	20 - 20,000 Hz ±1.5 dB
Attack time	1 ms
Recovery time	750 ms (from 0 to -20 dB)
Number of display segments	16 each for left and right channel

Design and specifications are subject to change without notice.

**Note**

This appliance conforms with EEC Directives 76/889 and 82/499 regarding interference suppression.

## OPERATING VOLTAGE

Before connecting the unit to the power source, check that the operating voltage of your unit is the same as the local power line voltage.

The USA and Canada model operates on 120 V AC.  
The European model operates on 220 V AC (or 240 V AC adjustable by authorized Sony personnel).

The United Kingdom model operates on 240 V AC (or 220 V AC adjustable by authorized Sony personnel).

The model for other countries operates on 120, 220 or 240 V AC. The voltage selector is located on the rear panel. If the selector must be reset, disconnect the AC power cord and set the selector to the appropriate voltage.

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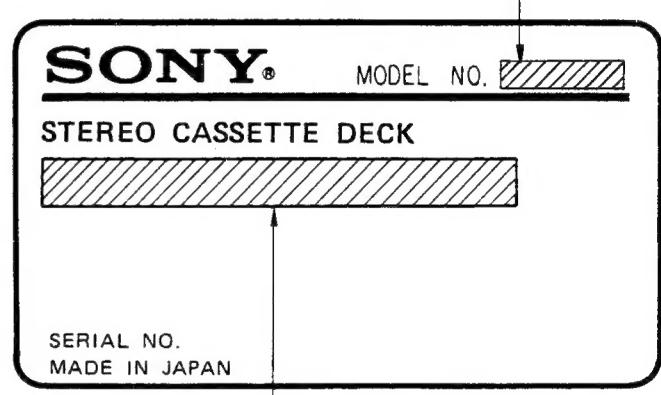
**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY SHADING AND MARK**  
**⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE**  
**PARTS LIST ARE CRITICAL TO SAFE OPERATION.**  
**REPLACE THESE COMPONENTS WITH SONY PARTS**  
**WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS**  
**MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

**MODEL IDENTIFICATION**

— Specification Label —

TC-K333ESR, TC-K730ES



AEP Model: AC: 220 V~50/60 Hz

UK Model: AC: 240 V~50/60 Hz

E Model: AC: 120/220/240 V~50/60 Hz 30 W

US Model: AC: 120 V 60 Hz 30 W

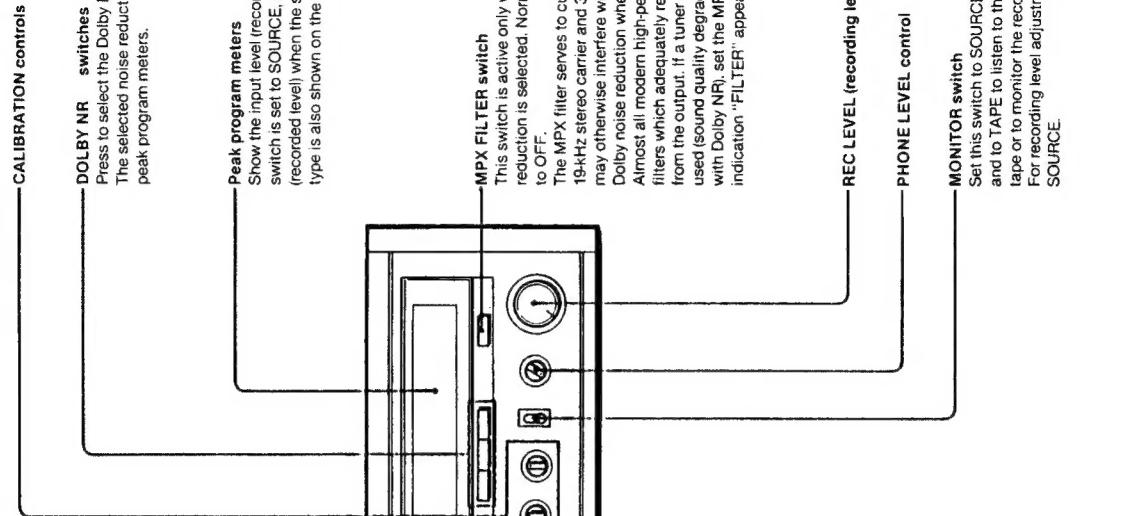
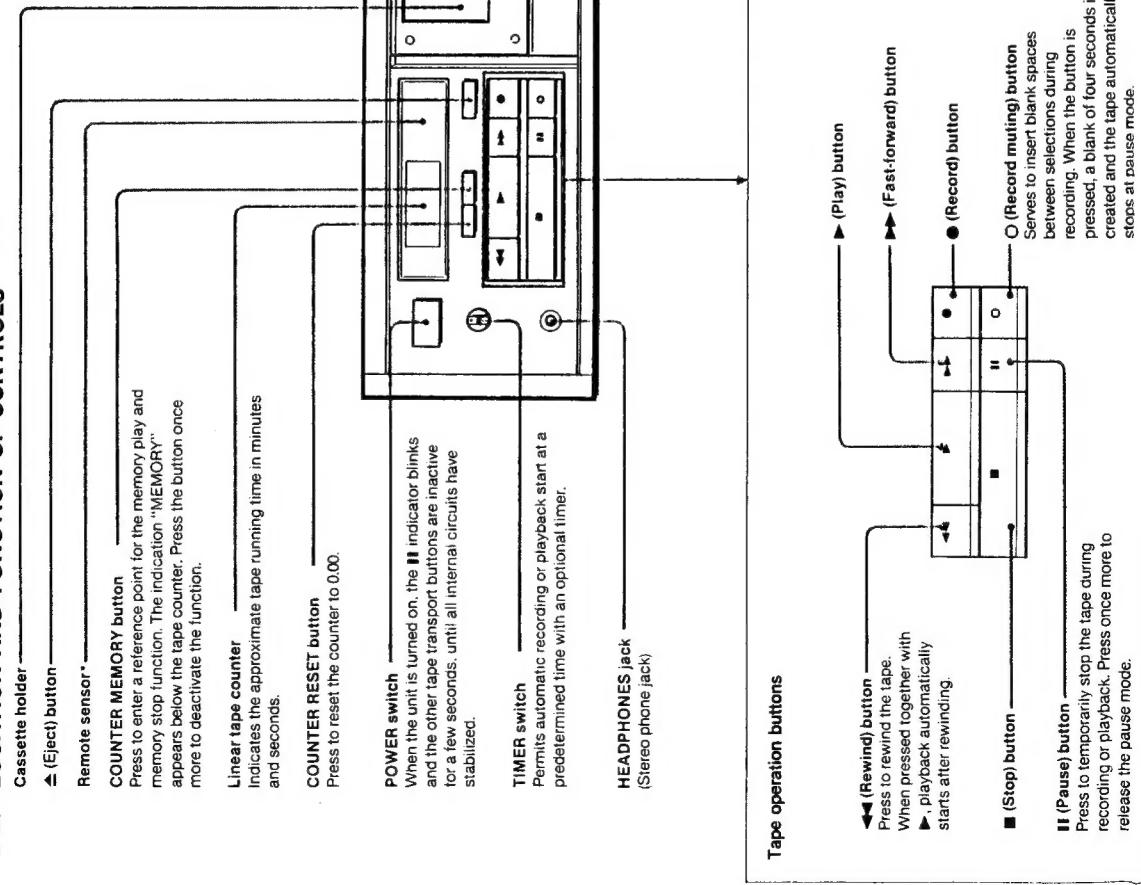
Canadian Model: AC: 120 V 60 Hz 30 W

**ATTENTION AU COMPOSANT AYANT RAPPORT  
À LA SÉCURITÉ!**

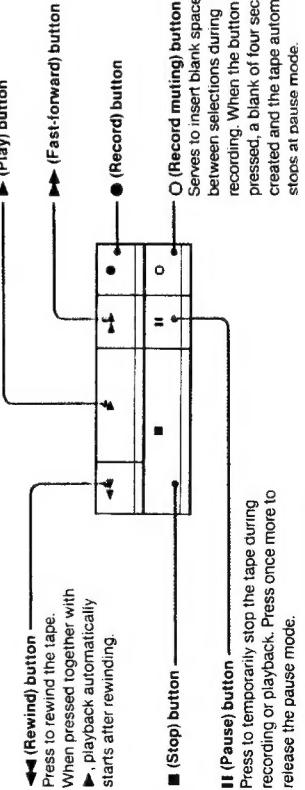
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET  
UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉ-  
MATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES  
POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REM-  
PLACER CES COMPOSANTS QUE PAR DES PIÈCES  
SONY DONT LES NUMÉROS SONT DONNÉS DANS CE  
MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR  
SONY.

# SECTION 1 GENERAL

## 1-1. LOCATION AND FUNCTION OF CONTROLS



## Tape operation buttons



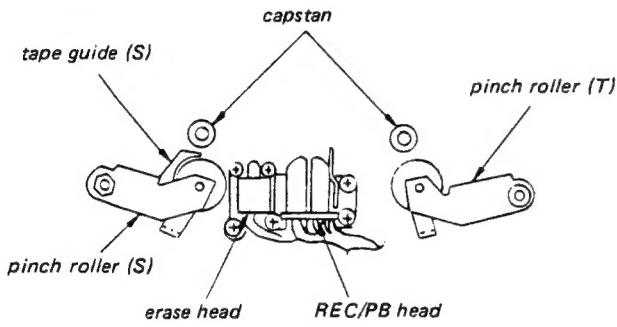
## SECTION 2

### MECHANICAL ADJUSTMENTS

**PRECAUTION**

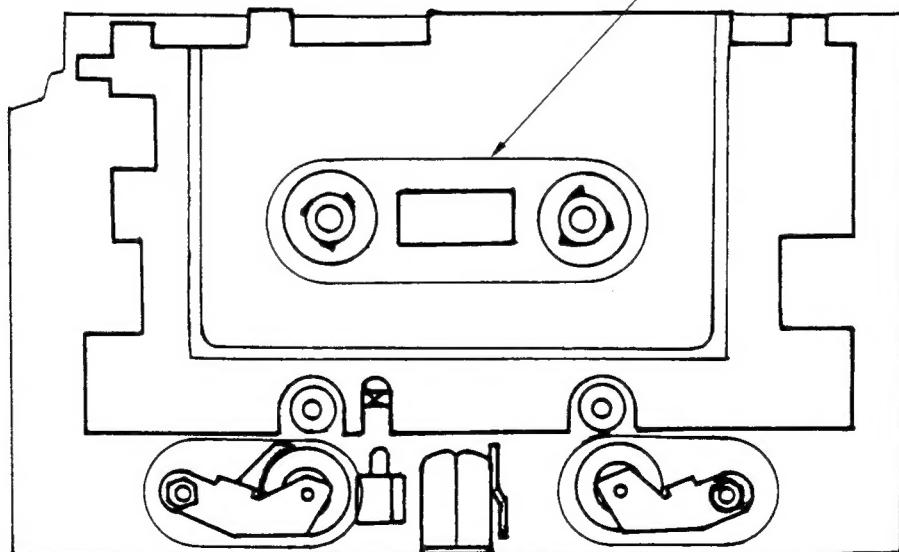
1. Clean the following parts with a denatured-alcohol-moistened swab:
 

record/playback head	pinch roller
erase head	rubber belts
capstan	idle
2. Demagnetize the record/playback and erase head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

**FF, REW Torque Check**

1. Insert the torque meter CQ201B.
2. Check FF torque when changing the mode STOP → FF.
3. Check REW torque when changing the mode STOP → REW.

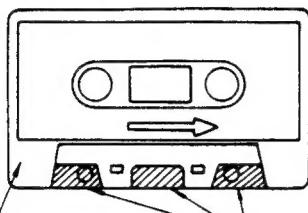
Torque	Torque meter	Reading
FF, REW	CQ201B	60 to 130 g·cm (0.84 to 1.82 oz-inch)



**Head Height Adjustment**

Insert a mirror cassette or adjustment cassette and adjust screws **A** - **C** so that the tape enters the tape guide of the record/playback head smoothly when pushing the head base out by hand.

1. Make an adjustment cassette as shown below or use a mirror cassette.

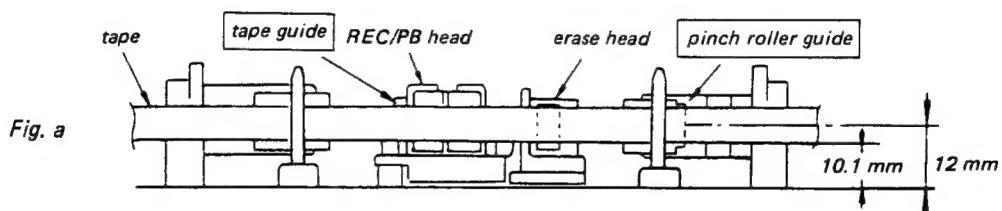


*C120 cassette tape      Cut out hatched portions.*

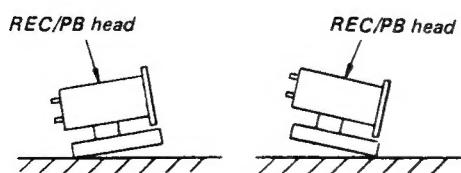
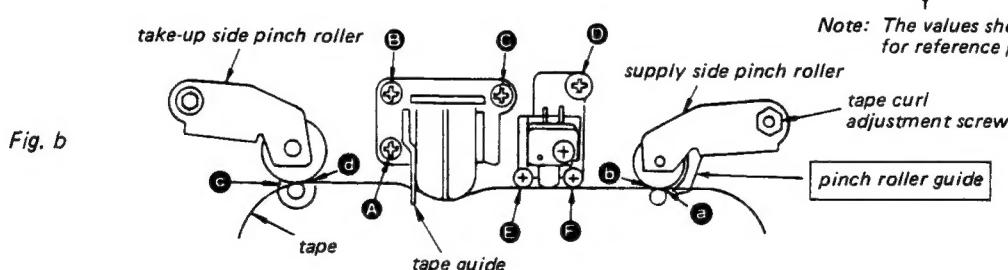
2. Insert the mirror cassette (or adjustment cassette) into the set. In FWD mode, the tape should not curl at the portions shown by arrows (tape guides) in Fig. a.  
If it does, adjust the height of tape guide of supply pinch roller.

**Adjustment locations:**

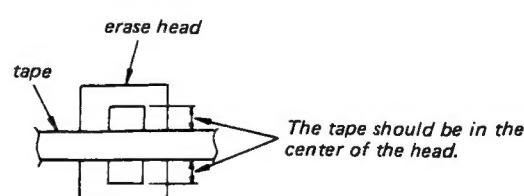
adjustment screw of tape curl in Fig. b  
(Be careful not to turn the screw more than 1/2 turn.)



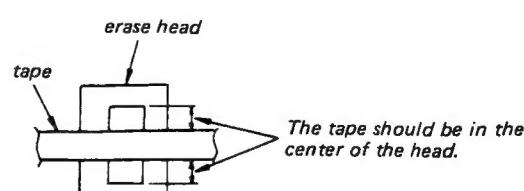
*Note: The values shown are for reference purposes.*



*Fig. c*



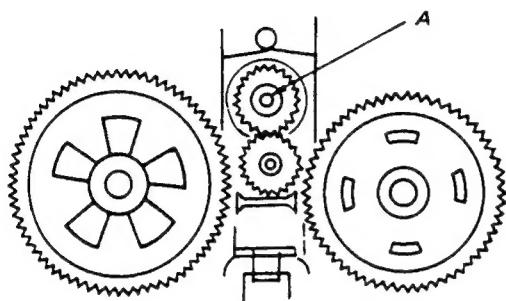
*Fig. d*



*Fig. e*

**Forward Torque/Back Tension Torque Adjustment**

1. Insert the taken-up tape, and set the Forward mode. Adjust RV701 so that the A begins to rotate.



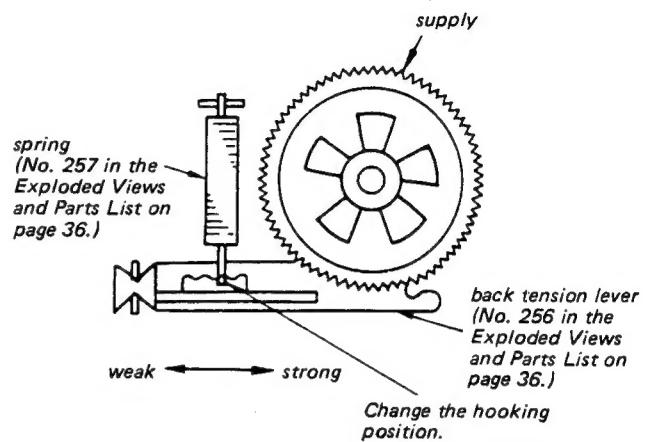
2. Insert the torque meter CQ102C, make sure that the forward torque and the back tension torque meet the specifications.

**Specifications**

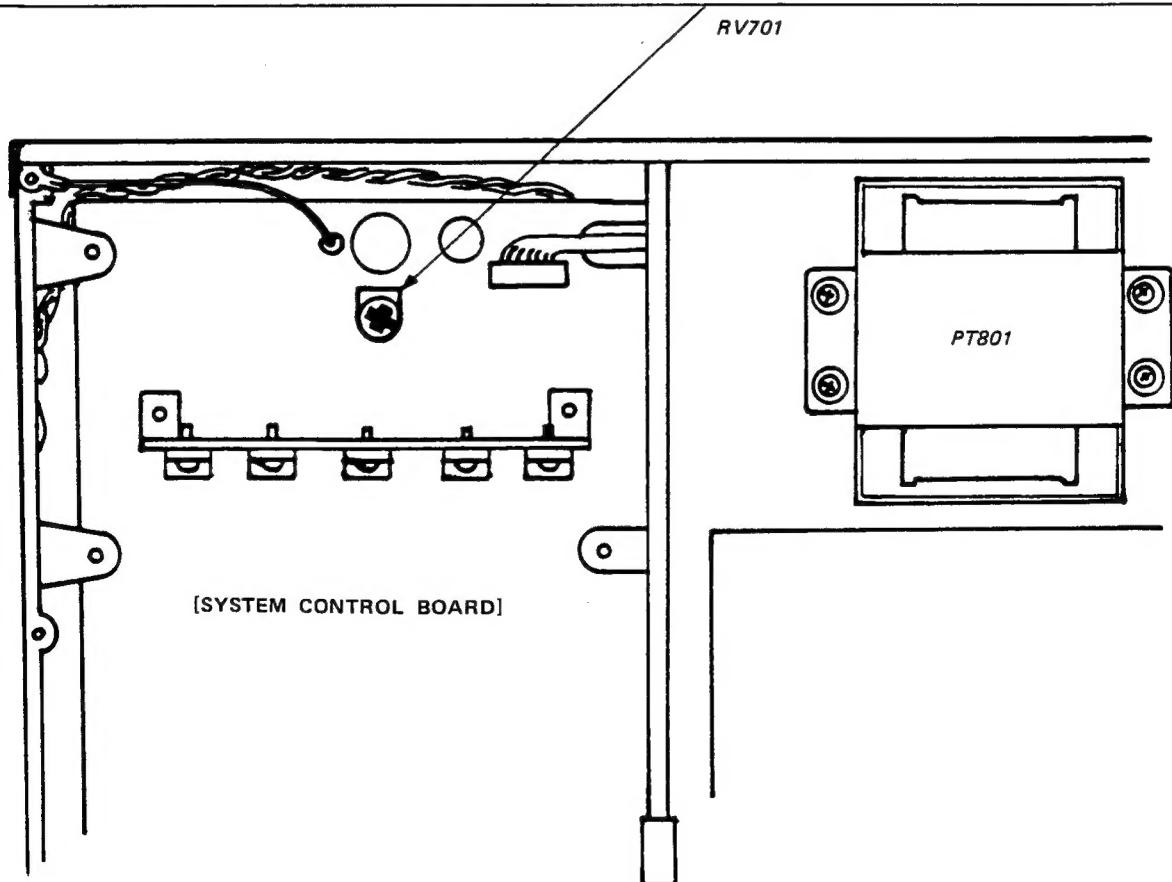
Forward torque: 30 to 60 g·cm  
(0.42 to 0.84 oz·inch)

Forward back tension torque:  
7 to 10.5 g·cm  
(0.1 to 0.15 oz·inch)

3. When the forward back tension torque doesn't meet the specifications, adjust by changing the hooking position of the spring as shown below.



**Adjustment Location:** system control board



## SECTION 3

### ELECTRICAL ADJUSTMENTS

**Note:** The adjustment should be performed in the order given in this service manual.  
The adjustments should be performed for both L-CH and R-CH.

- Simultaneous REC/PB Mode:

Input the signals to LINE IN terminal and set to REC mode. Set the monitor switch to TAPE, and monitor the recorded signal from LINE OUT terminal.

- Switch Position:

DOLBY NR . . . . . OFF  
NPX FILTER . . . . . OFF  
TIMER . . . . . OFF

- Standard Record:

Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

**Standard Input Level**

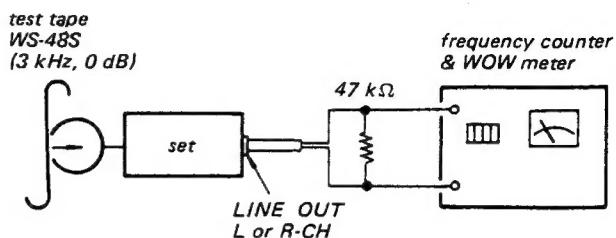
Input Terminal	LINE IN
source impedance	10 kΩ
input level	0.25 V (-10 dB)

**Standard Output Level**

Output Terminal	LINE OUT
load impedance	47 kΩ
output level	0.44 V (-5 dB)

#### Tape Speed/WOW Check

**Procedure:**



1. Measure the output frequency and the WOW value while playing back the tape top of the test tape.
2. Turn over the test tape, measure the output frequency and the WOW value, and check the difference against the values of the step 1.

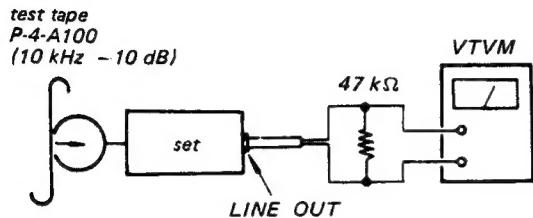
**Specification:**

TAPE SPEED deviation:	within 2,990 to 3,010 Hz
TAPE SPEED fluctuating width:	within 2,990 to 3,010 Hz
WOW (WRMS):	0.037% below

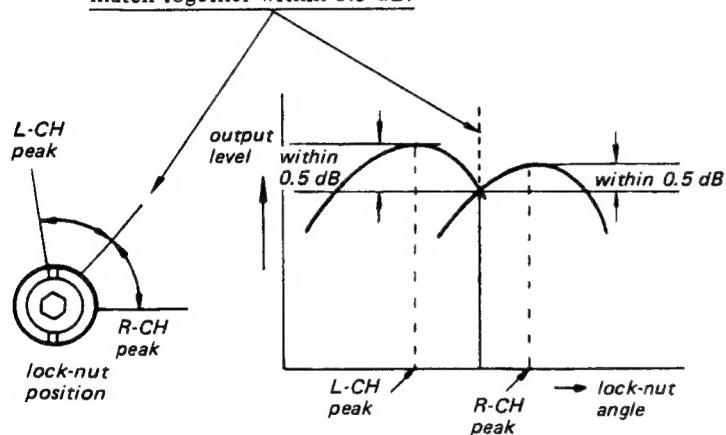
**Provisional Playback Head Azimuth Adjustment**

**Procedure:**

1. Mode: playback

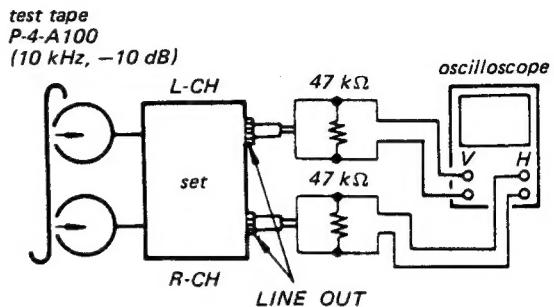


2. Turn the adjustment lock-nut for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 0.5 dB.

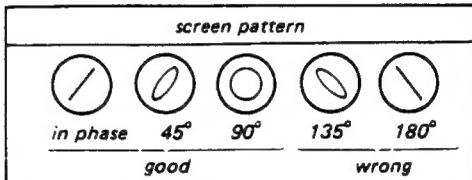


3. Phase check.

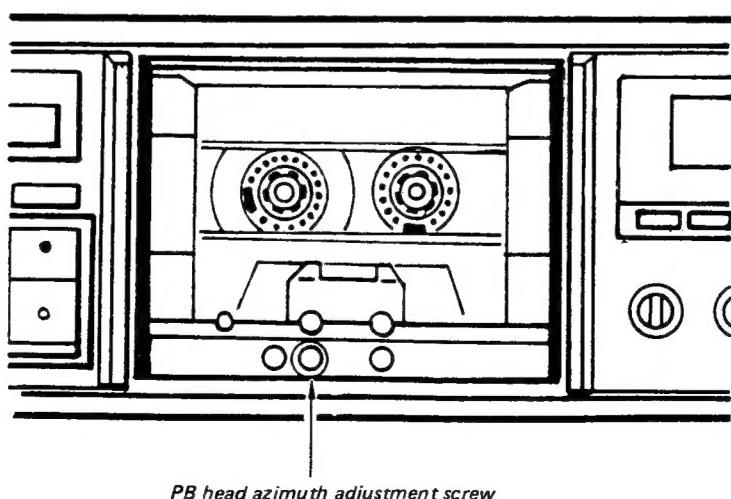
Mode: playback



4. Make sure the phase difference is in between in-phase to 90°.

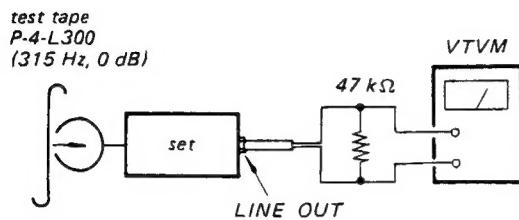


**Adjustment Location:**



**Playback Level Adjustment****Procedure:**

Mode: playback



Adjust RV101 (L-CH) and RV201 (R-CH) to obtain the specified LINE OUT level.

**Specification:**

LINE OUT level: 0.41 to 0.46 V  
(-5.5 to -4.5 dB)

Level difference between channels:  
less than 0.5 dB

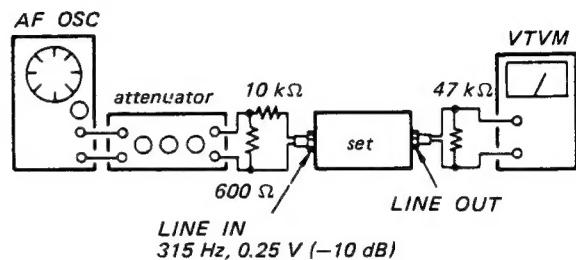
Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

**Adjustment Location:** PB board**Meter Level Adjustment****Setting:**

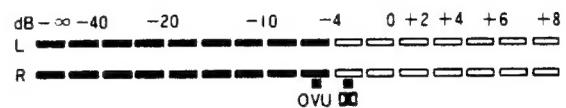
MONITOR switch: SOURCE

**Procedure:**

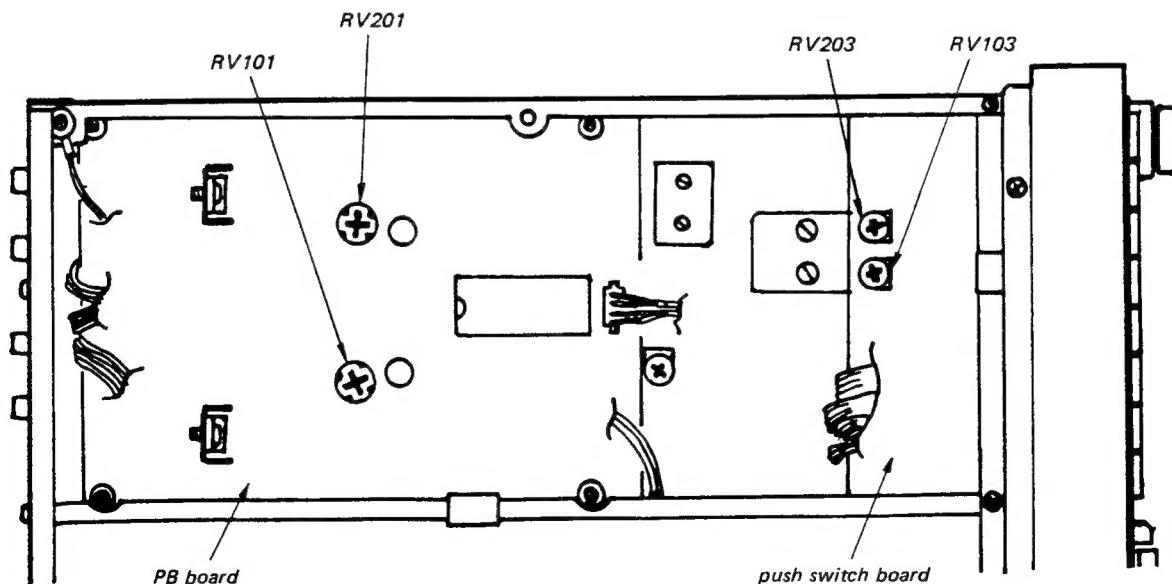
1. Stop mode.



2. Adjust the recording level so that the LINE OUT level is 0.44 V (-5 dB). In this time adjust RV103 (L-CH) and RV203 (R-CH) so that the 0 VU (-4 dB) segments of the meter light-up.



3. Adjust the recording level so that the LINE OUT level is 1.9 V (8 dB). In this time, make sure that all the segments of the meter light-up.

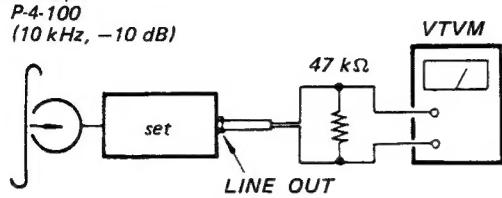
**Adjustment Location:** push switch board

**PB DOLBY NR Check**

**Procedure:**

1. Mode: playback

*test tape  
P-4-100  
(10 kHz, -10 dB)*



2. Make sure that the output levels are different in DOLBY NR OFF, B, and C.

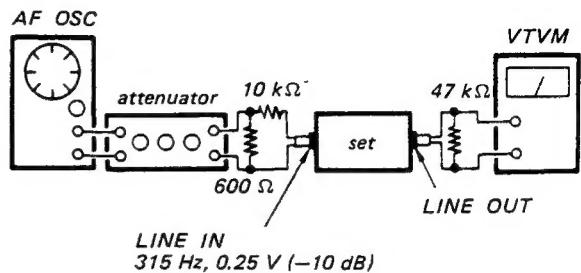
**Specification:**

OFF ↔ B level difference -0.5 to -2.5 dB  
B ↔ C level difference -0.5 to -2.5 dB

**MPX FILTER Check**

**Procedure:**

1. Mode: stop



2. Apply 315 Hz, 0.25 V (-10 dB) signal and adjust REC LEVEL control so that the LINE OUT level is 0.44 V (-5 dB).
3. Apply 19 kHz, 0.25 V (-10 dB) signal and measure the LINE OUT level.

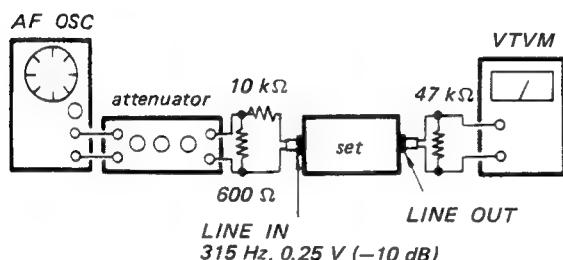
**Specification:**

DOLBY NR: OFF, FILTER: ON/OFF  
0.49 to 0.39 V (-4 to -6 dB)  
DOLBY NR: B, C, FILTER: ON  
0.025 V (-30 dB) or less

**Provisional Record Head Azimuth Adjustment****Setting:**

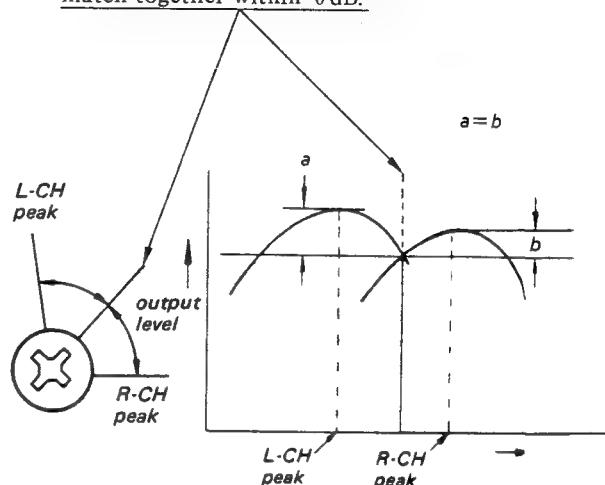
BIAS CAL control: center click

Turn RV506 (L-CH, R-CH) fully clockwise and counterclockwise 1/2 to 1 time. (See Record Bias Adjustment on page 13.)

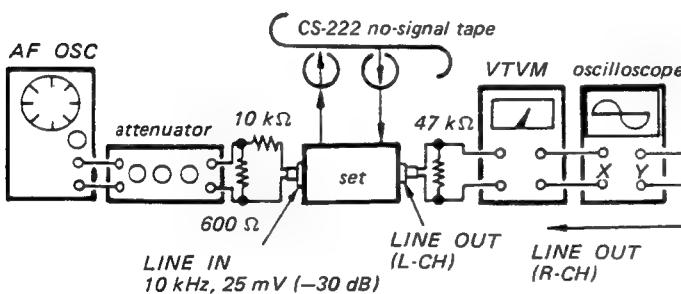
**Procedure:**

1. Apply 315 Hz, 0.25 V (-10 dB) signal and adjust REC LEVEL control so taht the LINE OUT level is 0.44 V (-5 dB).

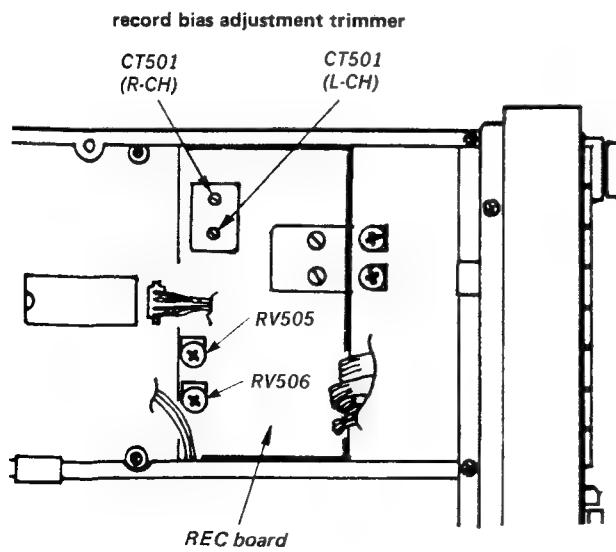
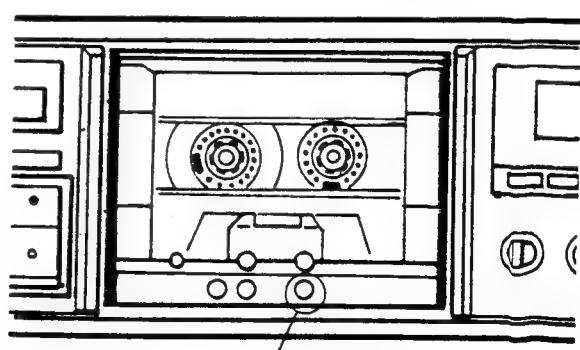
3. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 0 dB.



4. Simultaneously, adjust the azimuth screw so that the phase difference between L-CH and R-CH is 0°.



2. Apply 10 kHz, 25 mV (-30 dB) signal, set to the simultaneous REC/PB mode.

**Adjustment Location: REC board****Adjustment Location: head**

record head azimuth adjustment screw

## Bias Osc Frequency Adjustment

### Setting:

Metal Tape (TYPE IV)

LINE IN: no signal

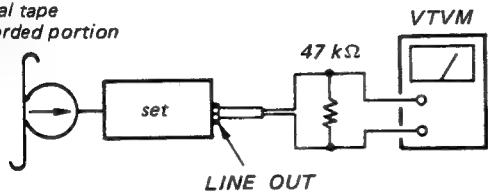
REC LEVEL knob: standard record position  
(See page 7.)

### ● Bias Osc Frequency

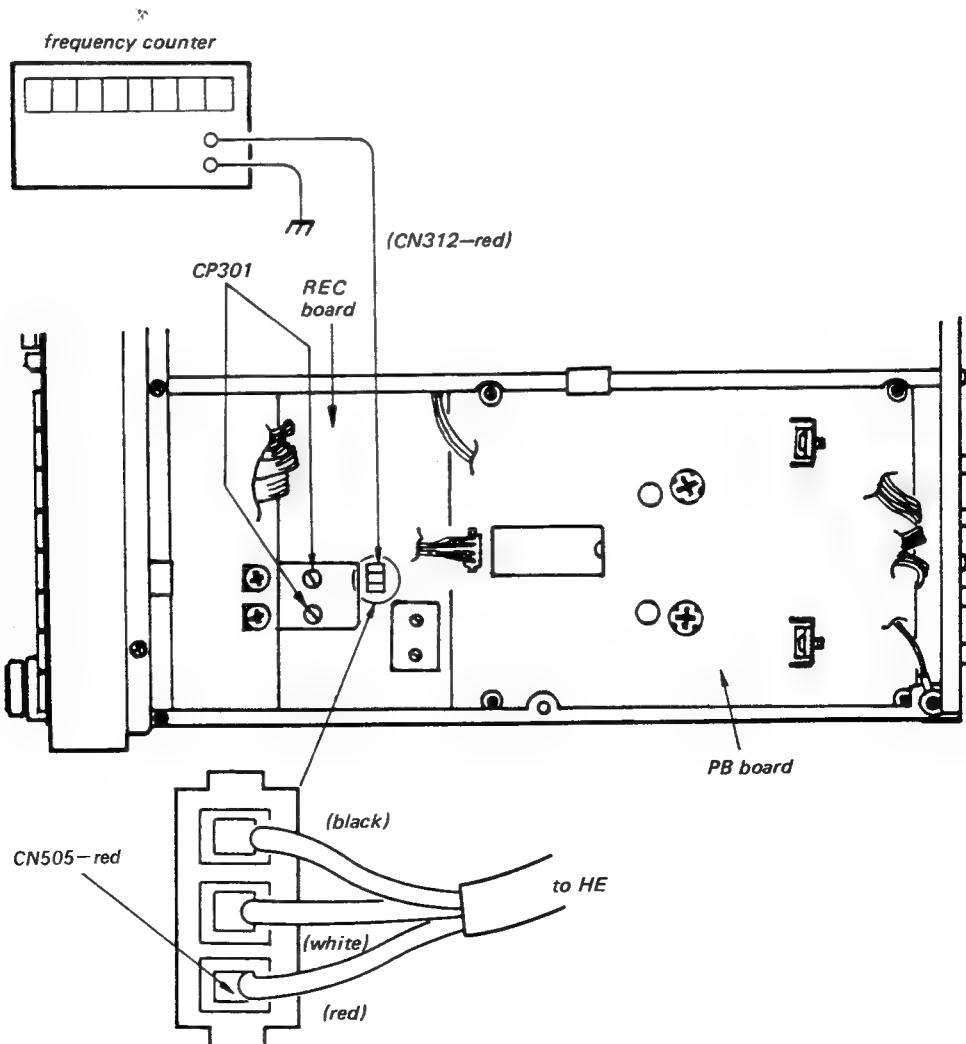
#### Procedure:

1. Mode: record

*metal tape recorded portion*



2. Connect the frequency counter lead, to the erase head connecting terminal. Adjust CP 501 so that the reading on the frequency counter is 105 kHz (within 104 to 106 kHz).



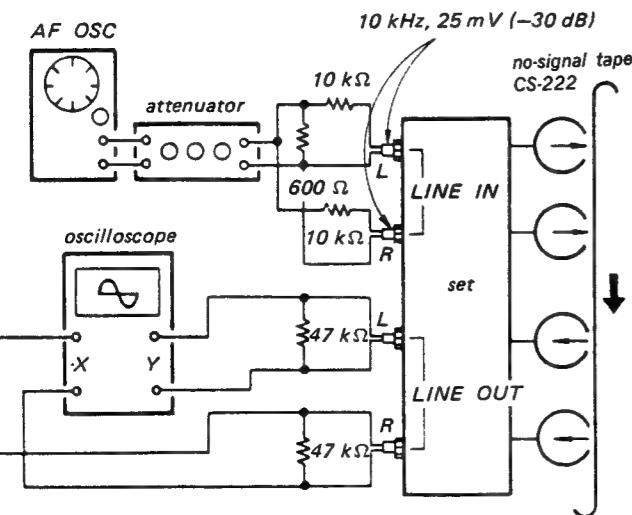
### Record Head Azimuth Adjustment

#### Setting:

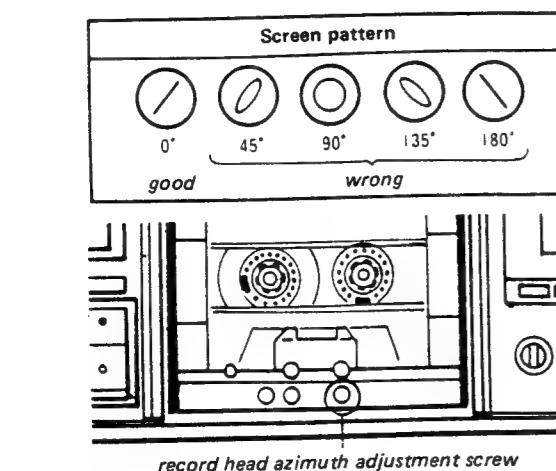
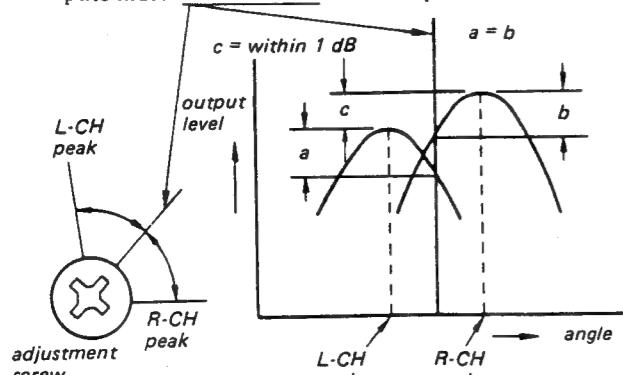
REC LEVEL knob: standard record position  
(See page 7.)

#### Procedure:

1. Mode: simultaneous REC/PB



2. Adjust the record head azimuth adjustment screw so that the phase difference is  $0^\circ$  (the difference between L-CH and R-CH is within  $5^\circ$ ), and outputs match within 1 dB from the peak.



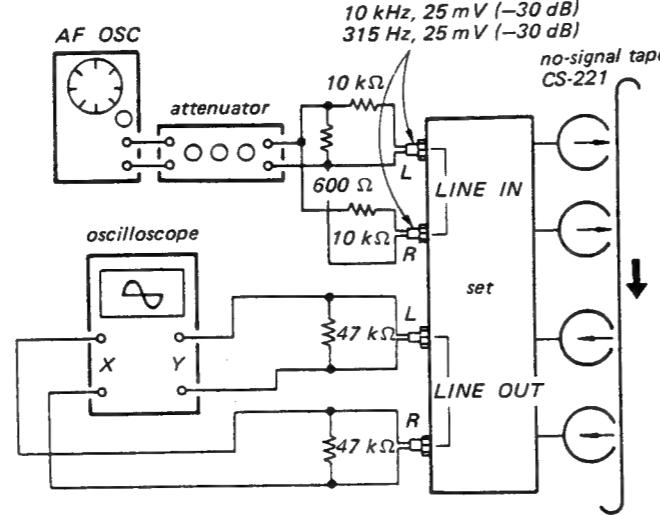
### Record Bias Adjustment

#### Setting:

REC LEVEL knob: standard record position  
(See page 7.)

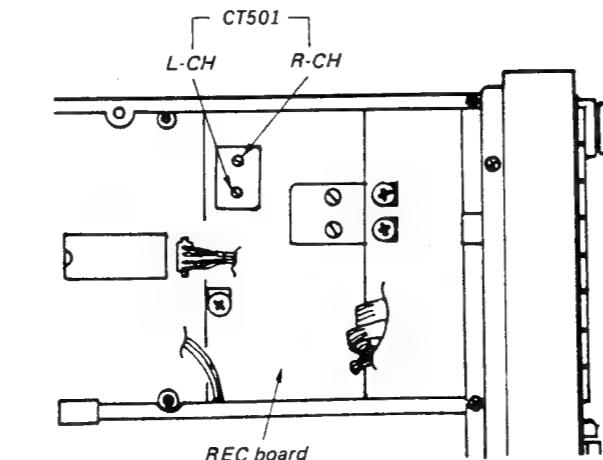
#### Procedure:

1. Mode: simultaneous REC/PB

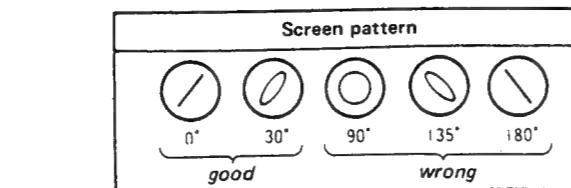


2. Adjust CT501 (L-CH, R-CH) to  $0 \text{ dB} \pm 0.5 \text{ dB}$  playback level at 315 Hz and 10 kHz.

Adjustment Location: REC board



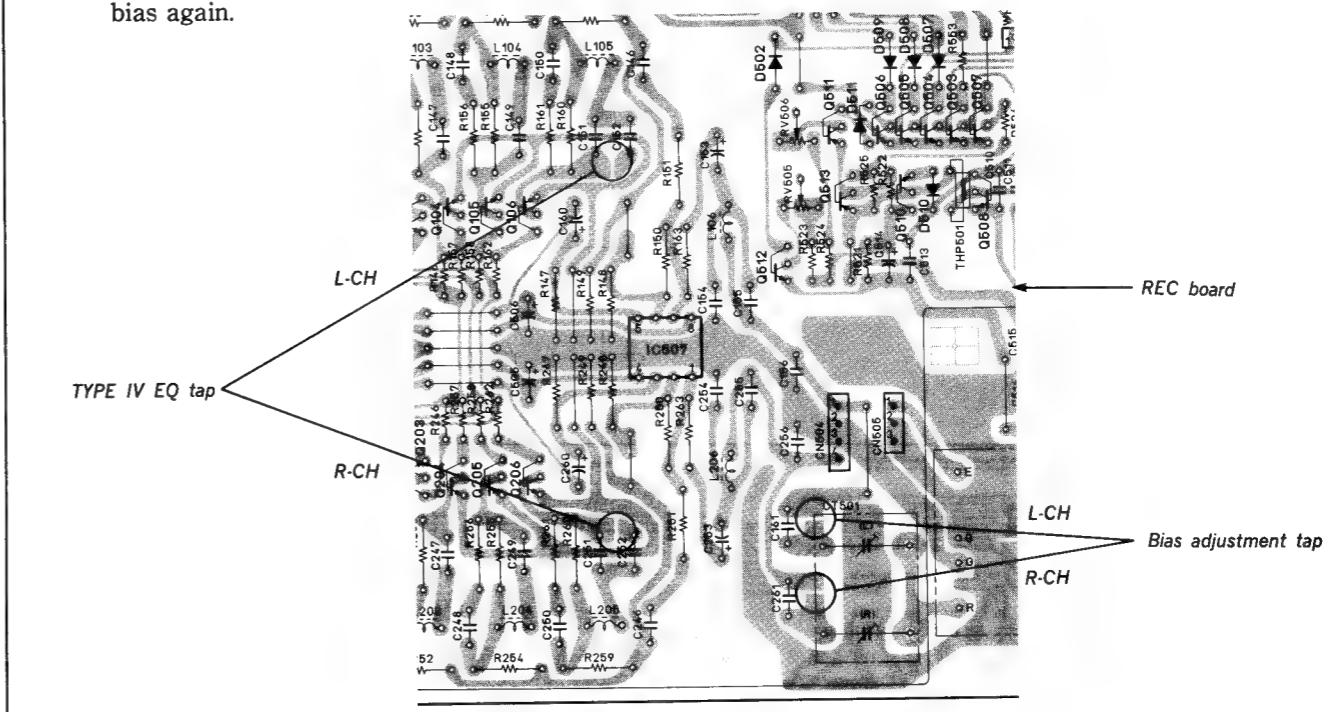
3. After the adjustment, confirm the phase at 10 kHz is  $0^\circ$  (the difference between L-CH and R-CH is within  $30^\circ$ ). Repeat the record head azimuth adjustment and the record bias adjustment satisfy the specification again.



### Note:

For an adjusting trimmer, finish the adjustment within one rotation from the tightly closed state.

If more than one rotation is necessary, remove the bias adjusting tap, and adjust the bias again.



### Normal Bias Adjustment

#### Setting:

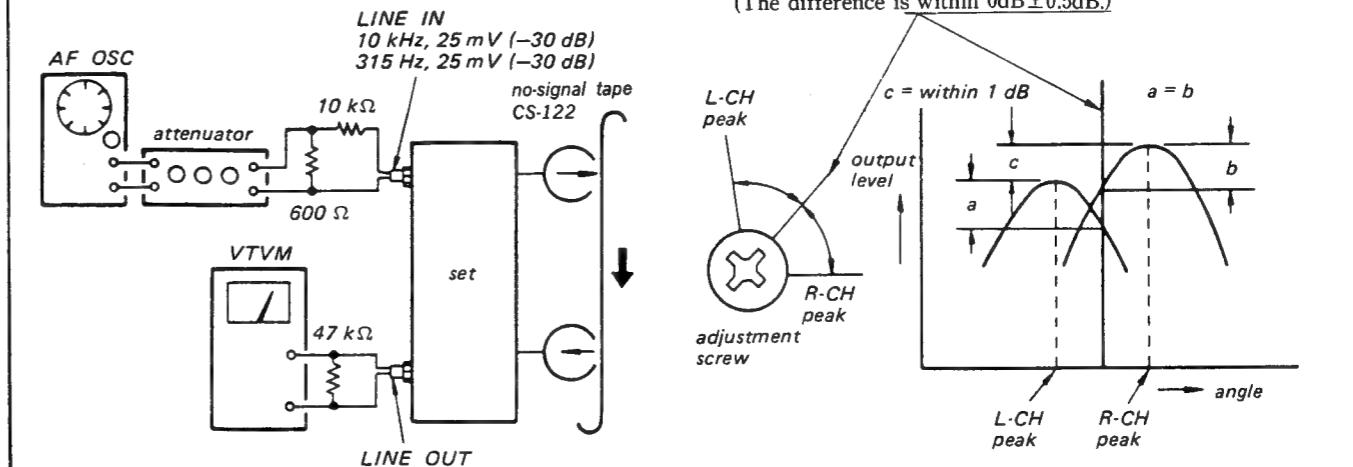
REC LEVEL knob: standard record position  
(See page 7.)

#### Procedure:

1. Mode: simultaneous REC/PB

2. Adjust RV505 to obtain the same playback level at 315Hz and 10kHz.

(The difference is within  $0 \text{ dB} \pm 0.5 \text{ dB}$ .)



METAL  
Setting :  
REC LEV

Procedu

1. Mode

AF OSC

2. Adjus

playb

(The

L-CH

peak

adjus

ment

scre

Adj

## SECTION 4 DIAGRAMS

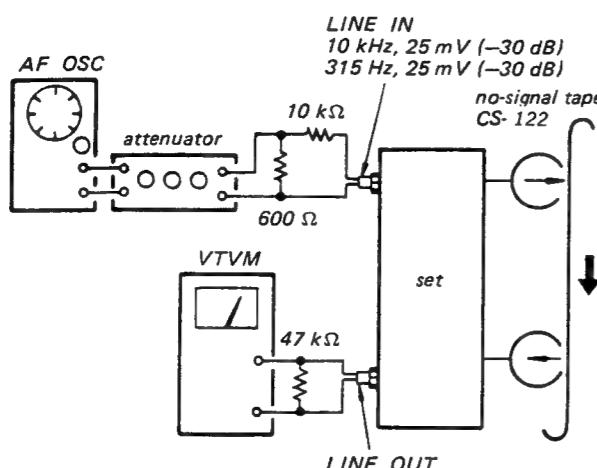
### METAL Bias Adjustment

Setting:

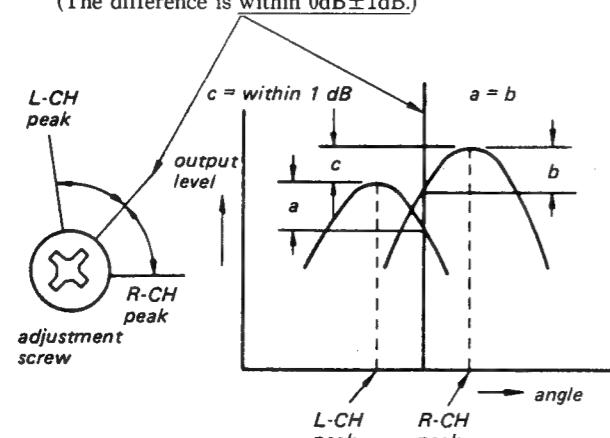
REC LEVEL Knob: Standard record position  
(See page 7.)

Procedure:

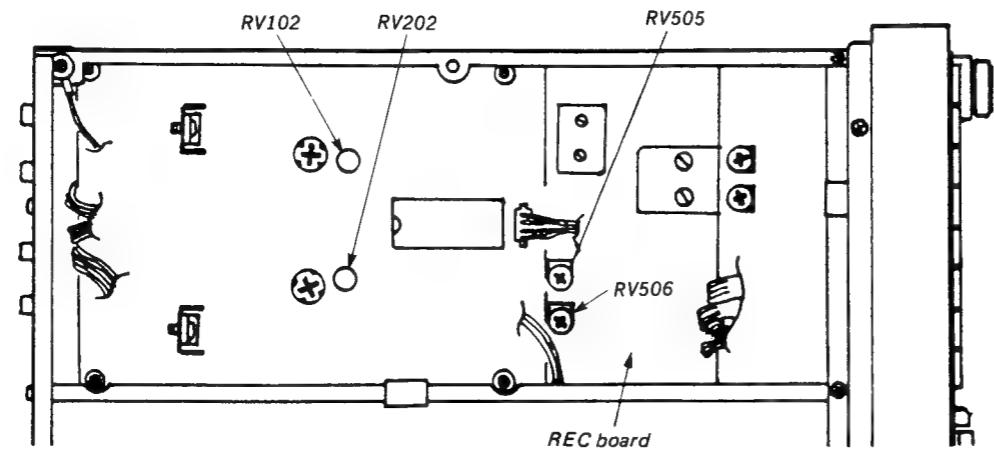
- Mode: simultaneous REC/PB



- Adjust RV506 and TYPE IV EQ tap to obtain the same playback level at 315kHz and 10kHz.  
(The difference is within  $0\text{dB} \pm 1\text{dB}$ .)



Adjustment Location: REC board



- After adjustment, check the phase with 10kHz and make re-adjustment at 0° (L-CH, R-CH phase difference: Within  $0 \pm 90^\circ$ ), and repeat the adjustment of bias and recording head vertical adjustment fully.

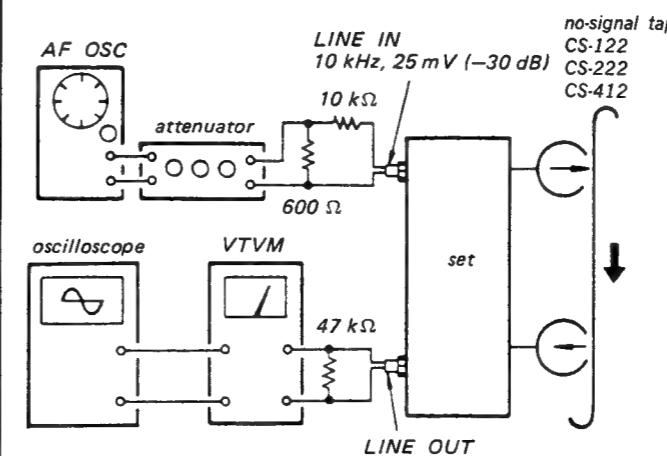
### Record Level Adjustment

Setting:

REC LEVEL knob: standard record position  
(See page 7.)

Procedure:

- Mode: simultaneous REC/PB



- Adjust RV102 (L-CH) and RV202 (R-CH) to satisfy the specification.

Specification:

Tape CS-222	within 0.41 to 0.46 V (Within -5.5 to -4.5 dB)
Tape CS-122, 412	within 0.39 to 0.49 V (within -6 to -4 dB)

### 4-1. SEMICONDUCTOR LEAD LAYOUTS

BA6138	M5220P M5238P NJM4560D $\mu$ PC4558C	2SA1175 2SC2785 2SD1020	H2S6B1L H2S6C3L H2S7B2L H2S9B2L H2S11C3L H2S241L RD5.1JS-B1
CX20174			letter side
NJM78L12A			8 7 6 5 1 2 3 4 (Top view)
CX20188 MB88517B-228N			30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 (Top view)
TC9142P			Output Vcc Ground (Top view)
MSL9359RS MSL9512RS			16 15 14 13 12 11 10 9 1 2 3 4 5 6 7 8 (Top view)
$\mu$ PC4558G-T1			US1060M 1SS132 10E2N
M5F78M10			1 2 3 4 (Top view)
M5F79M10			IN GND OUT cathode anode
DTA124ES DTA144ES DTC114ES DTC124ES DTC144ES			2SD809-K letter side
PH102-K			B C E cathode anode
BG5628S BR5628S EAA5638S			14 13 12 11 10 9 8 1 2 3 4 5 6 7 (Top view)

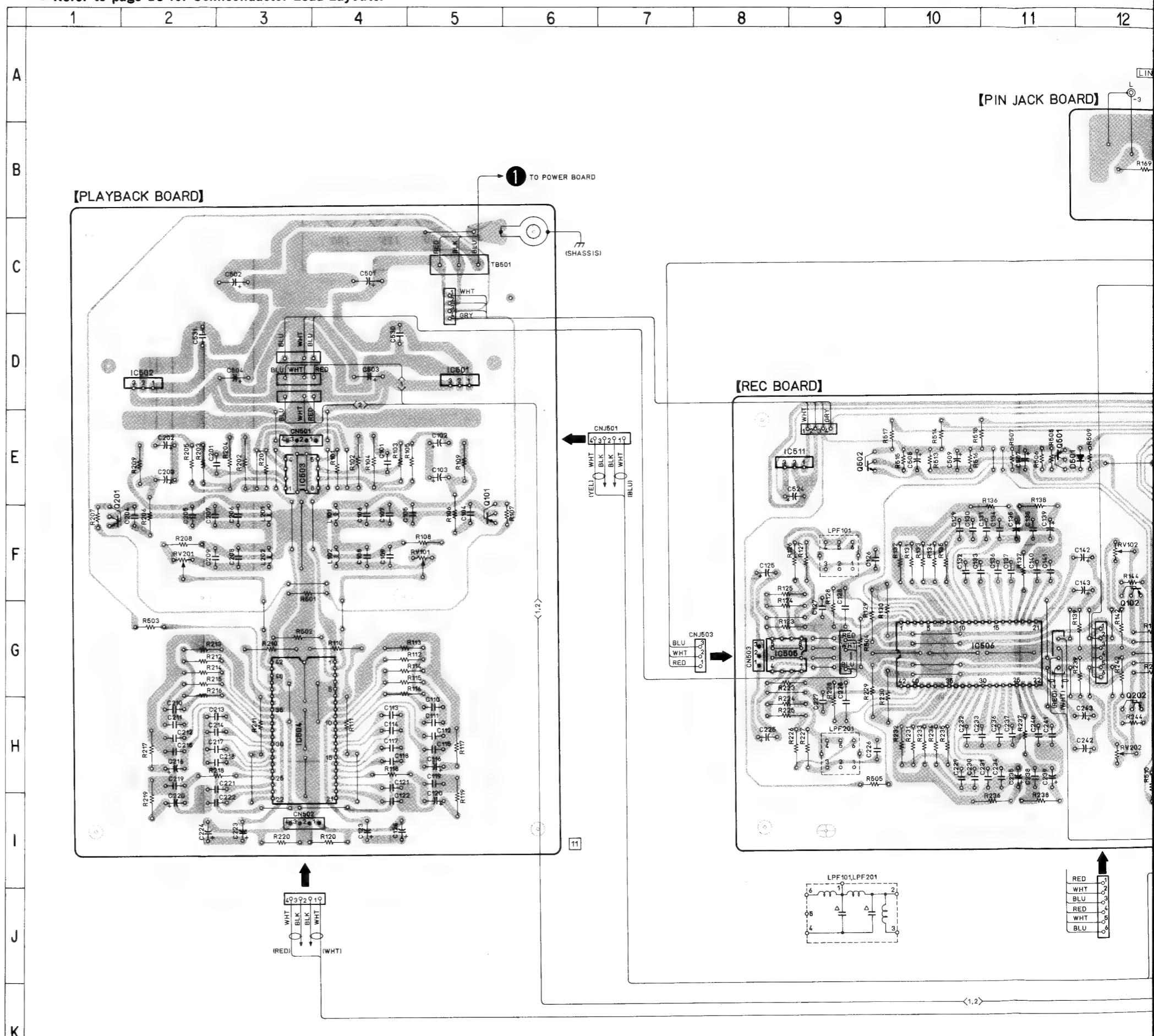
**4-2. PRINTED WIRING BOARD—AUDIO SECTION—**  
**• Refer to page 16 for Semiconductor Lead Layouts.**

● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
IC501	D-5	Q509	F-16
IC502	D-2	Q510	F-15
IC503	E-3	Q511	F-15
IC504	H-3	Q512	G-15
IC505	G-8	Q513	F-15
IC506	G-10	Q514	E-18
IC507	G-14	Q515	G-25
IC508	H-18	Q516	C-22
IC509	F-18	Q517	C-22
IC510	H-23	Q518	C-23
IC511	E-8	Q519	C-22
IC512	C-25	Q520	C-22
Q101	F-5	Q1001	I-5
Q102	G-12	Q1002	J-4
Q103	F-13		
Q104	F-13	D501	E-11
Q105	F-13	D502	F-15
Q106	F-13	D503	E-13
Q201	F-1	D504	E-13
Q202	H-12	D505	E-15
Q203	H-13	D506	E-15
Q204	H-13	D507	E-16
Q205	H-13	D508	E-15
Q206	H-13	D509	F-15
Q207	H-13	D510	F-16
Q501	E-11	D511	F-15
Q502	E-9	D512	F-17
Q503	F-16	D513	H-26
Q504	F-16	D514	B-22
Q505	F-15	D515	B-22
Q506	F-15	D516	C-24
Q507	F-16		
Q508	F-16		

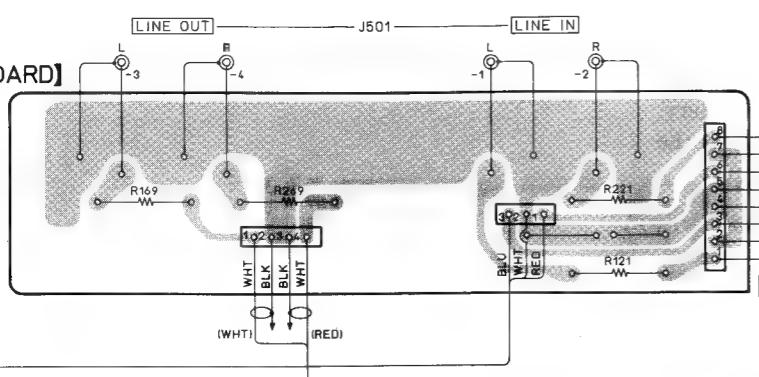
Note:

- ○ : parts extracted from the component side.
- ● : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.

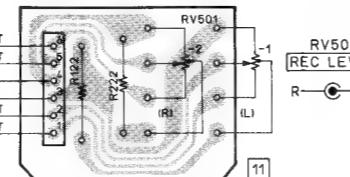


10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

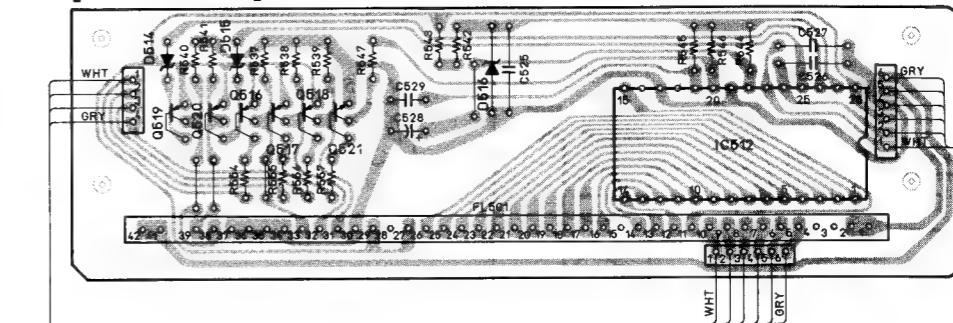
(PIN JACK BOARD)



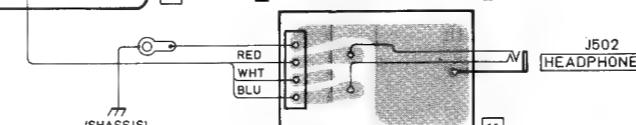
REC VOLUME BOAR



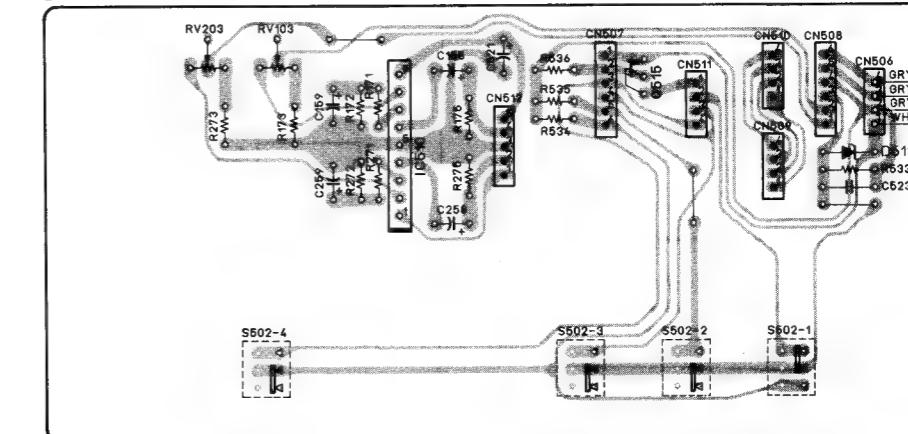
[METER BOARD]



HEADPHONE JACK  
BOARD

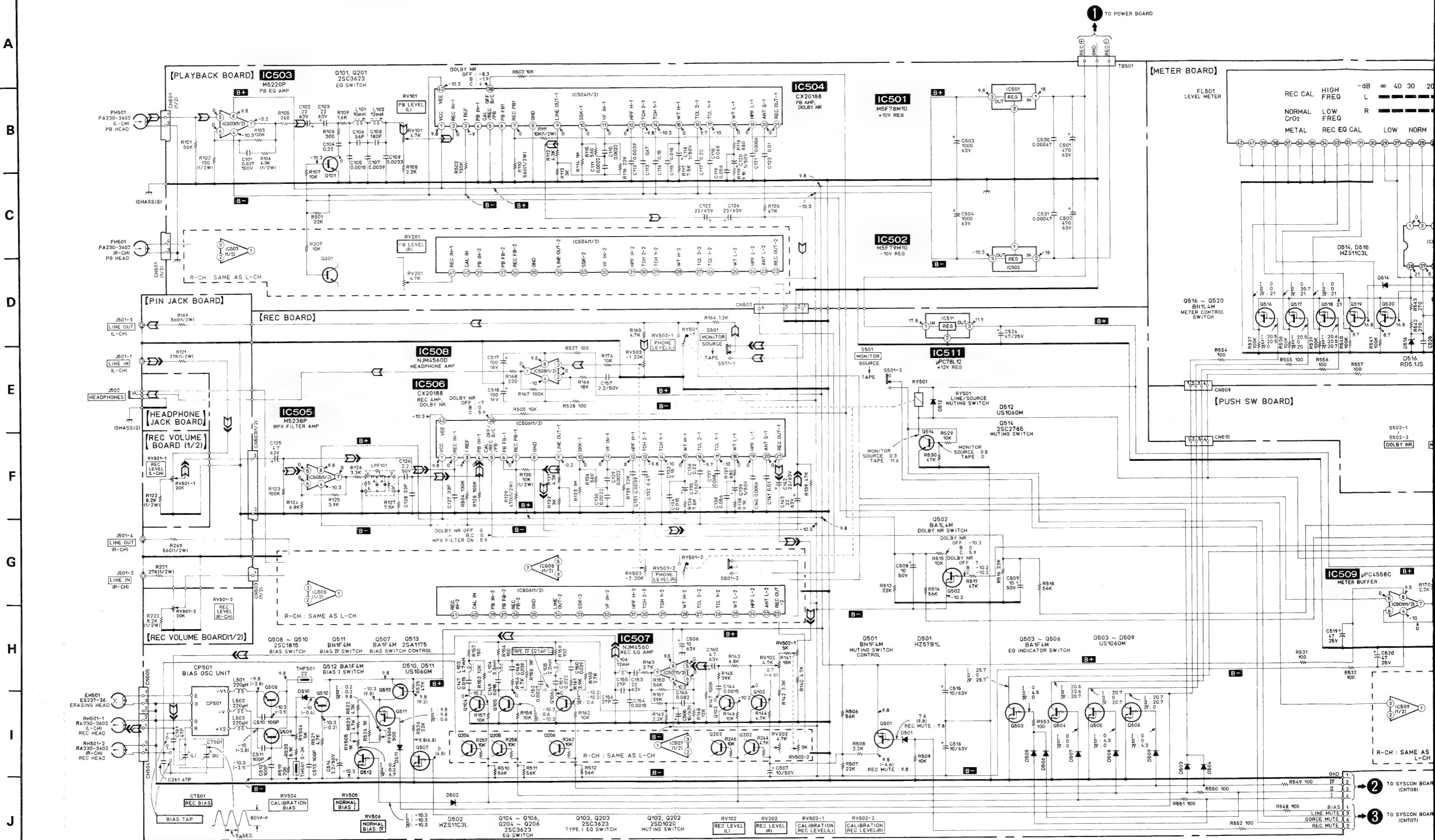


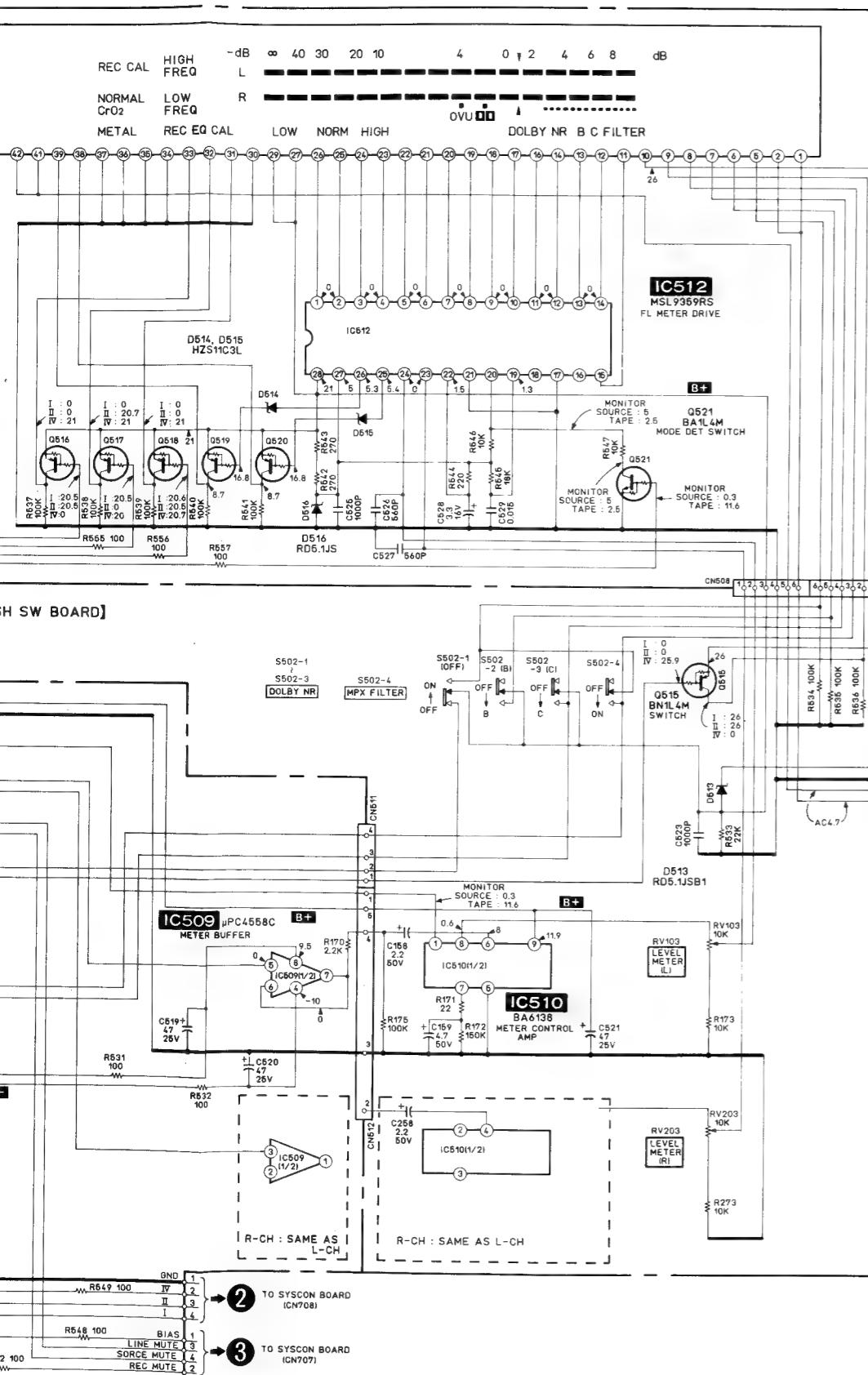
PUSH SW BOARD



#### **4-3. SCHEMATIC DIAGRAM—AUDIO SECTION—**

1      2      3      4      5      6      7      8      9      10      11      12      13      14      15      16





No

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{ W}$  or less unless otherwise specified.
- Components for right channel have same values as for left channel. Reference numbers are coded from 200.
- **B+** : B+ Line
- **B-** : B- Line
- **[ ]** : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.

no mark : STOP

( ) : REC

I : NORMAL

II : C<sub>2</sub>O<sub>2</sub>

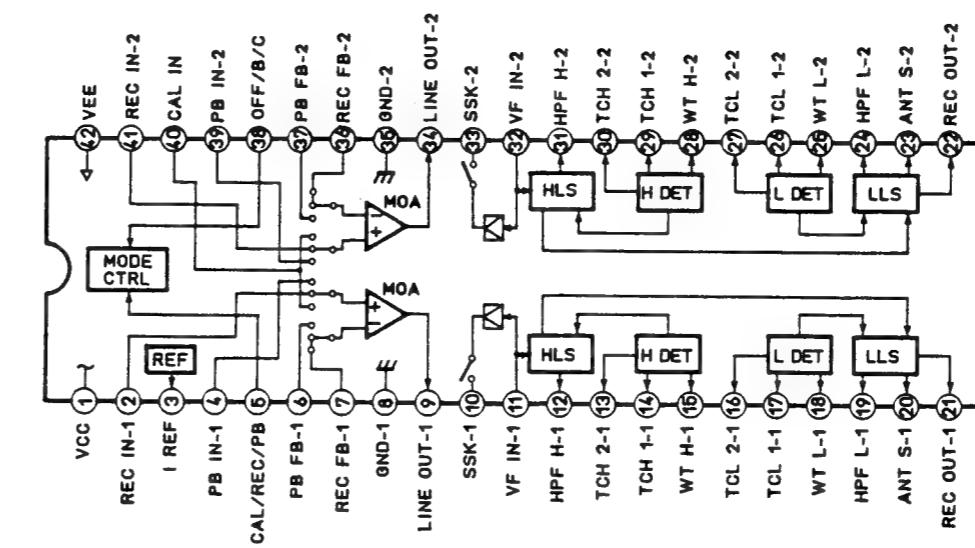
III : METAL

- Voltages are taken with a VOM (Input Impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Signal path.

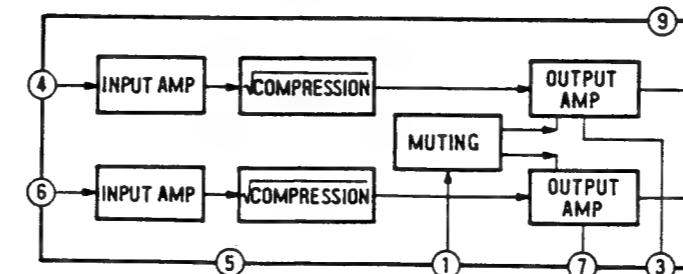
$\nearrow$  : PB

$\searrow$  : REC

IC504 CX2018



IC510 BA613



#### 4-4. PRINTED WIRING BOARD—SYSTEM CONTROL SECTION—

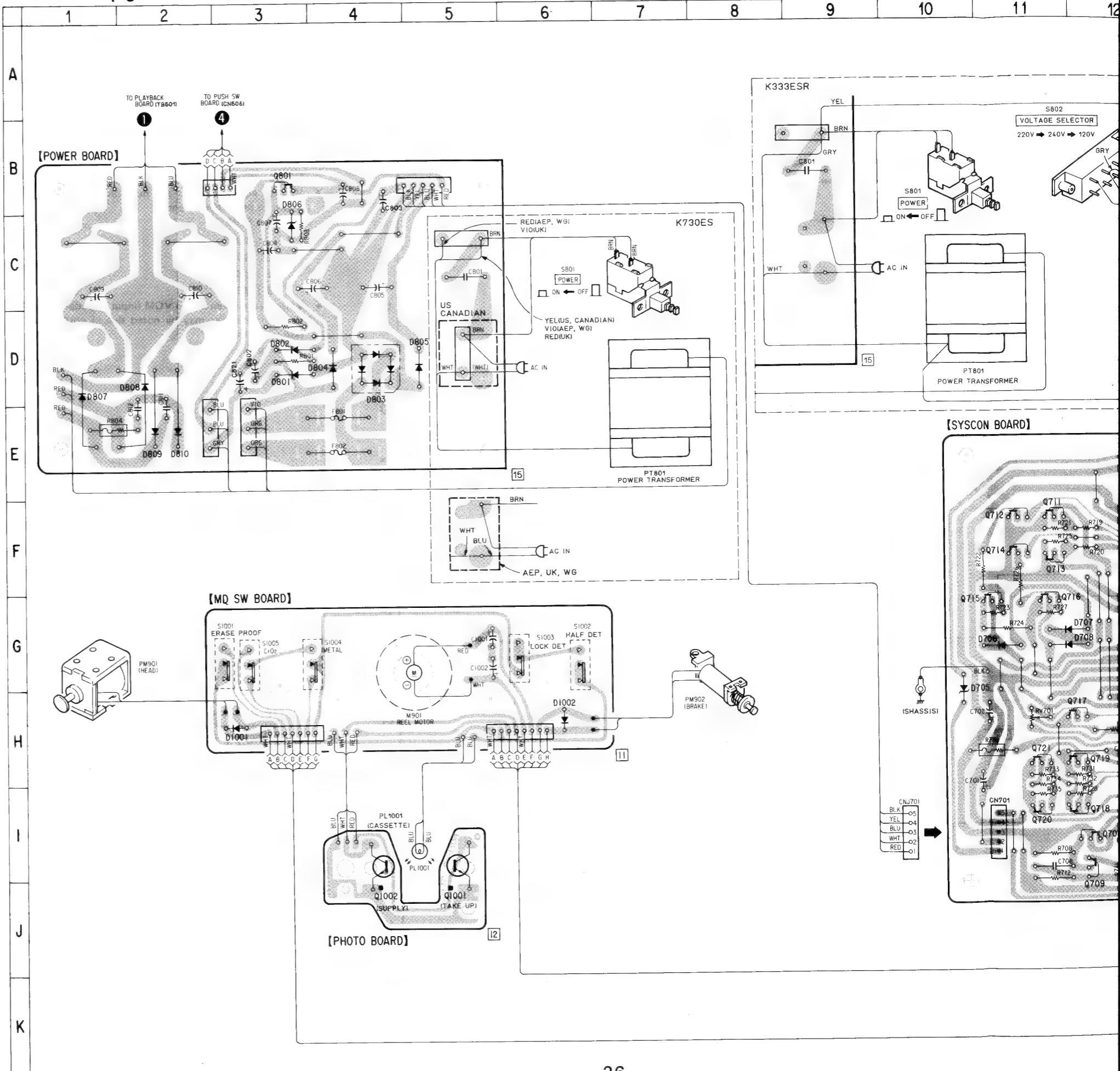
• Refer to page 16 for Semiconductor Lead Layouts.

##### ● Semiconductor Location

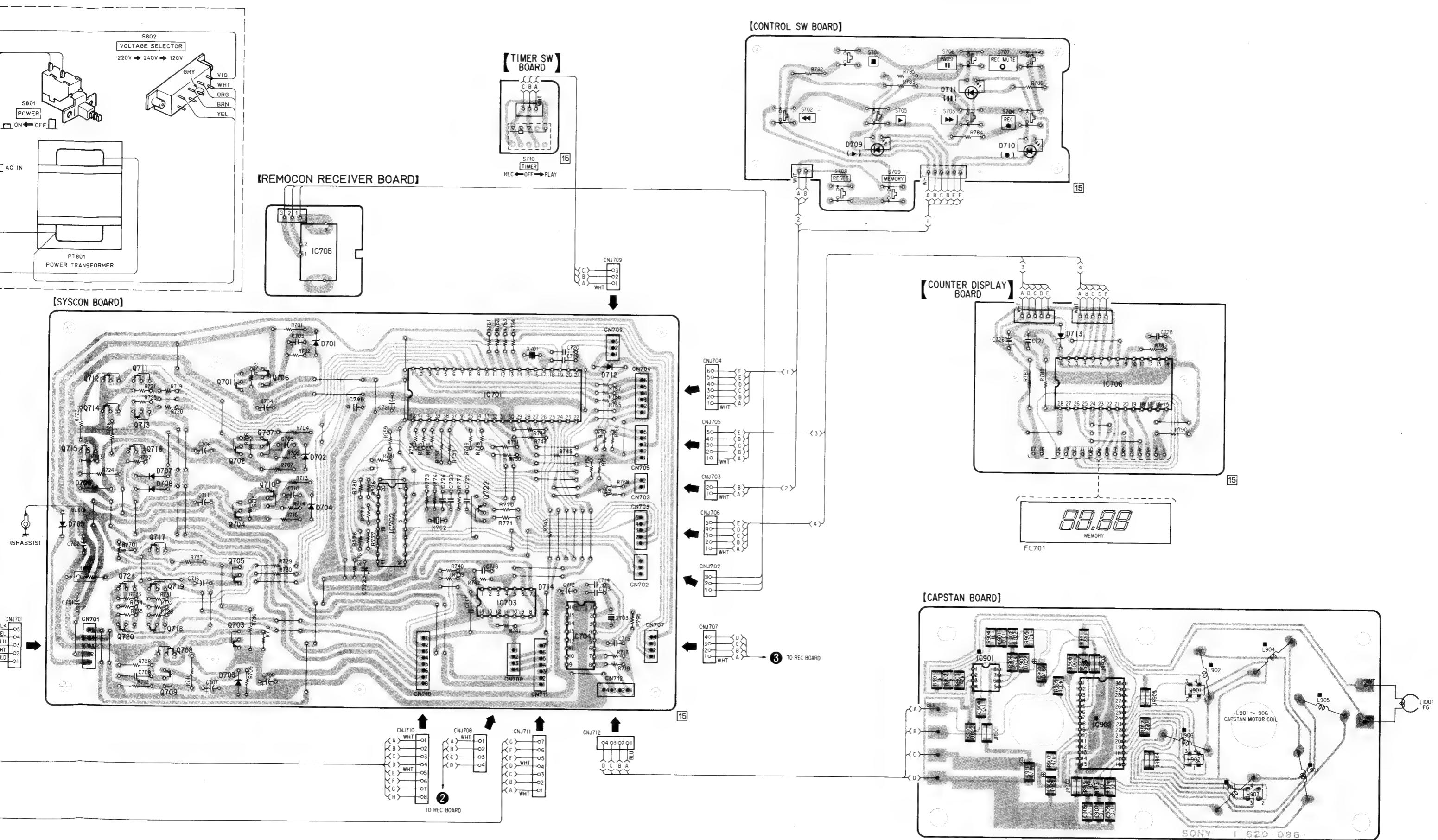
Ref. No.	Location	Ref. No.	Location
IC701	F-16	Q722	H-16
IC702	H-15	Q801	B-3
IC703	I-16		
IC704	I-17	D701	E-14
IC705	D-14	D702	G-13
IC706	F-23	D703	I-13
IC901	I-22	D704	G-14
IC902	J-23	D705	H-10
		D706	G-11
Q701	F-13	D707	G-12
Q702	G-13	D708	G-12
Q703	I-13	D709	C-20
Q704	G-13	D710	C-22
Q705	H-13	D711	B-22
Q706	F-13	D712	F-17
Q707	G-13	D713	E-23
Q708	I-12	D714	H-16
Q709	J-12	D801	D-3
Q710	G-13	D802	D-3
Q711	F-11	D803	D-4
Q712	F-11	D804	D-4
Q713	F-11	D805	D-5
Q714	F-11	D806	B-3
Q715	G-11	D807	D-1
Q716	G-11	D808	D-2
Q717	H-12	D809	E-2
Q718	I-12	D810	E-2
Q719	H-12	D1001	H-3
Q720	I-11	D1002	H-6
Q721	H-11		

##### Note:

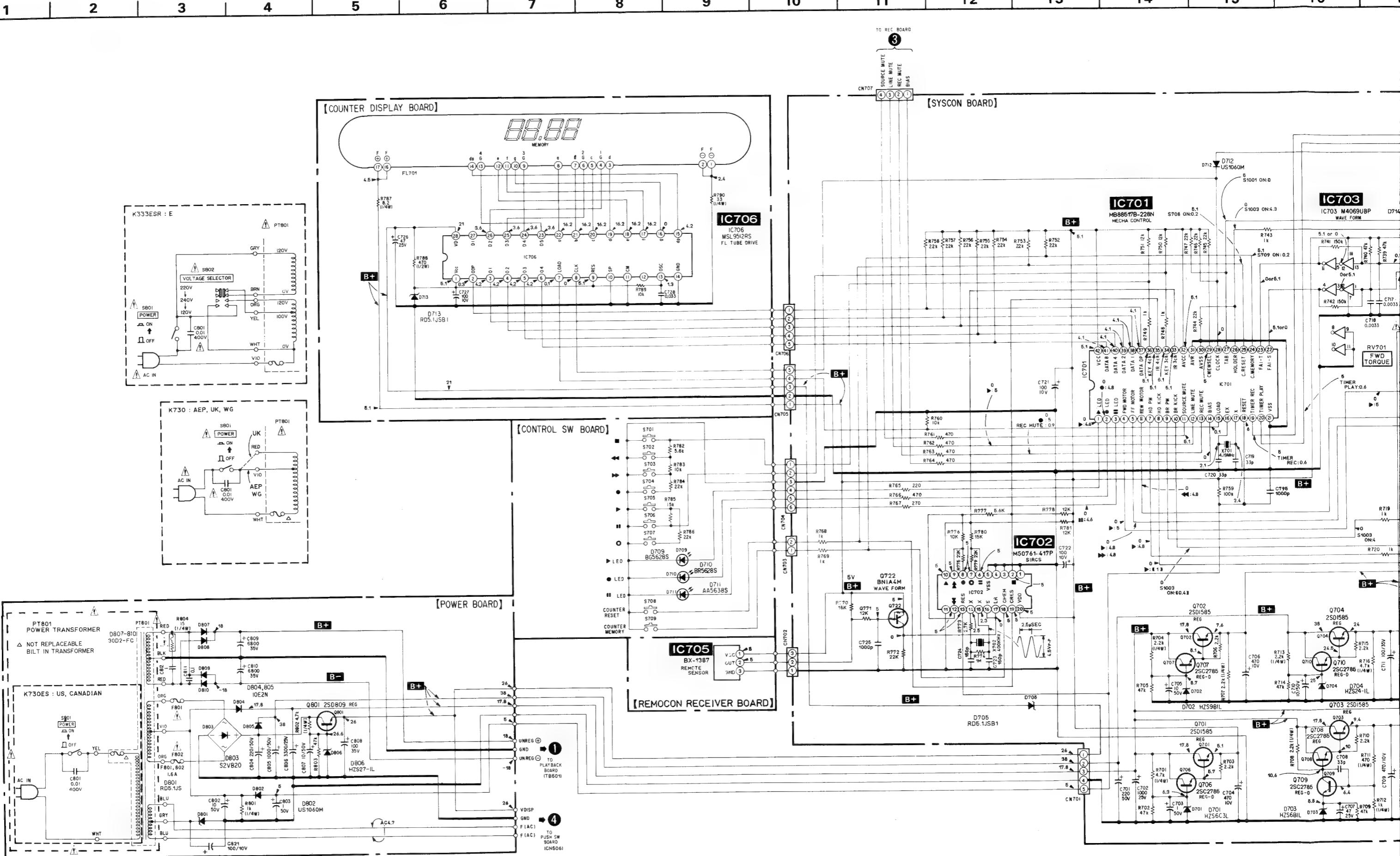
- — : parts extracted from the component side.
- — : parts extracted from the conductor side.
- : parts mounted on the conductor side.

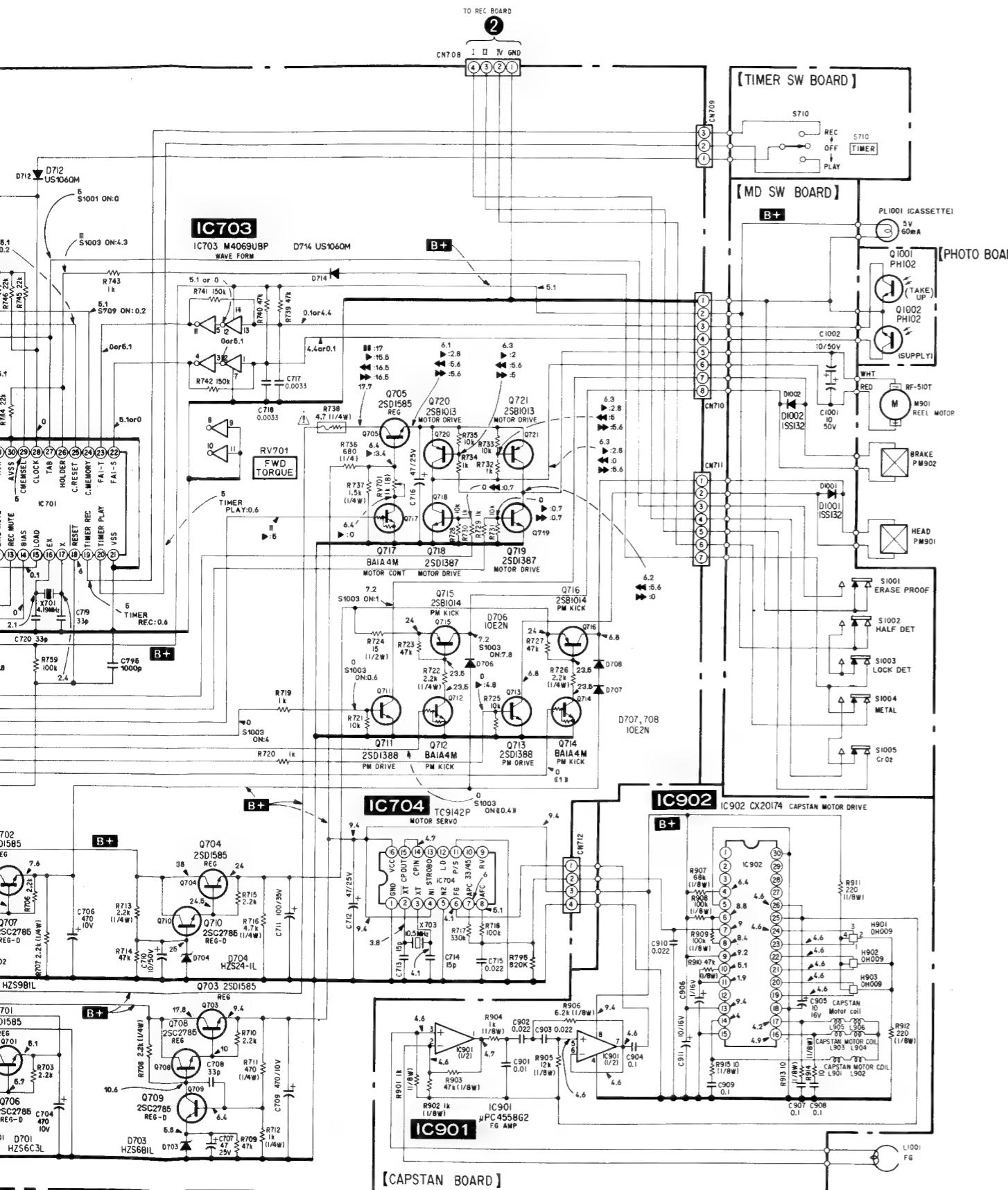


10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



4-5. SCHEMATIC DIAGRAM—SYSTEM CONTROL SECTION



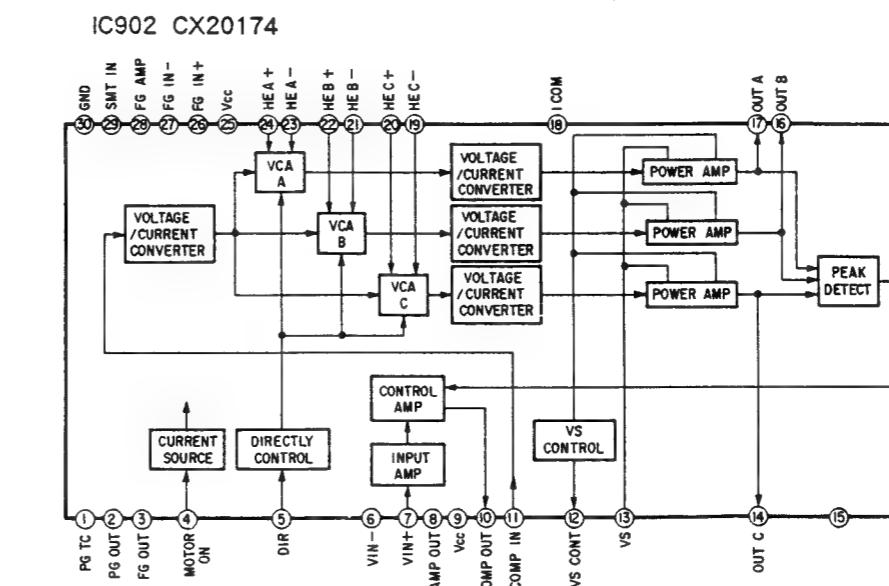


N

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
-  : fusible resistor.
-  : B+ Line
-  : B- Line
-  : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.  
no mark: STOP  
 : Momentary voltage in power switch ON.
-  : PLAY       : PAUSE  
 : FF       : REW      ● : REC
- Voltages are taken with a VOM (input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.

**Note:**  
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.



## SECTION 5 EXPLODED VIEWS

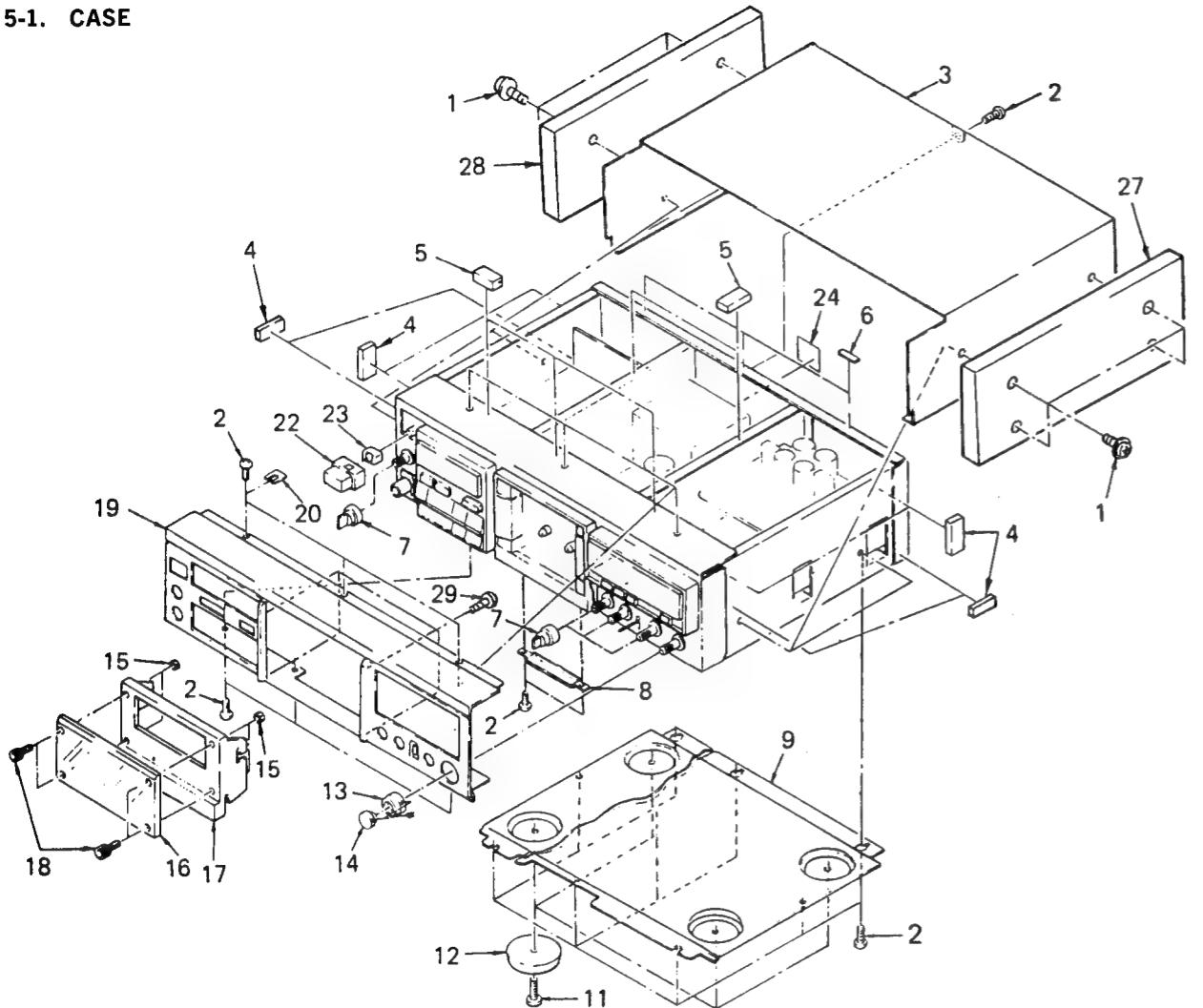
TC-K333ESR/K730ES

TC-K333ESR/K730ES

### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

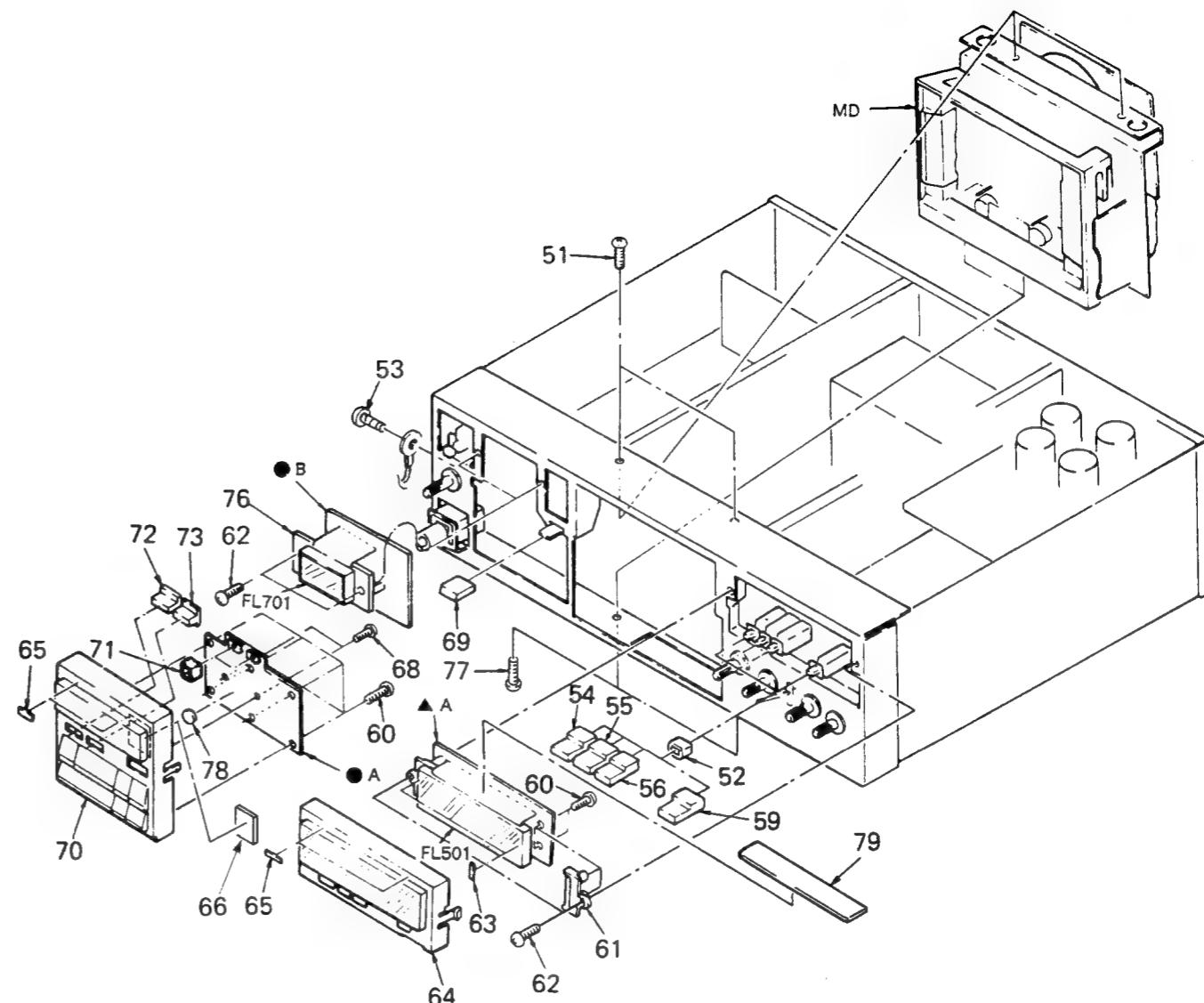
### 5-1. CASE



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	4-820-330-31	(UK)...SCREW, BW, PLUS MINUS		19	X-3304-946-1	(E).....PANEL ASSY, FRONT	
	4-885-979-11	(EXCEPT UK)...SCREW (4X25)			X-3304-949-1	(US,Canadian)....PANEL ASSY, FRONT	
2	7-682-547-09	SCREW +BV 3X6, S TIGHT			X-3304-951-1	(AEP,UK).....PANEL ASSY, FRONT	
3	3-318-660-11	CASE		20	3-544-028-21	SPACER	
4	9-911-841-XX	CUSHION		22	4-908-046-01	KNOB, SQUARE	
5	9-911-843-XX	CUSHION, FLYWHEEL		23	4-864-307-00	RING	
6	9-911-837-XX	CUSHION (B), FILTER		24	*3-350-430-01	(E).....LABEL, MODEL NUMBER	
7	3-304-929-11	KNOB, HEADPHONE			*3-350-431-01	(US,Canadian)....LABEL, MODEL NUMBER	
8	3-304-962-00	COVER, MD			*3-350-432-01	(AEP).....LABEL, MODEL NUMBER	
9	*3-350-419-01	BOARD, BOTTOM			*3-350-433-01	(UK).....LABEL, MODEL NUMBER	
10	3-703-685-21	SCREW (+BV 3X8)		27	X-3304-936-1	(US,Canadian,AEP,E) ...PLATE (RIGHT) ASSY, SIDE	
11	7-682-562-09	SCREW +B 4X10			X-3304-948-1	(WG)....PLATE (RIGHT) ASSY, SIDE	
12	X-3304-944-1	FOOT ASSY		28	X-3304-937-1	(US,Canadian,AEP,E) ...PLATE (LEFT) ASSY, SIDE	
13	X-3304-924-1	KNOB (LEFT) ASSY, REC			X-3304-947-1	(WG)....PLATE (LEFT) ASSY, SIDE	
14	X-3304-925-1	KNOB (RIGHT) ASSY, REC		29	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
15	7-622-207-05	N 2.6, TYPE 2					
16	3-350-410-01	WINDOW, CASSETTE					
17	3-350-415-11	LID, CASSETTE					
18	7-683-412-05	BOLT, HEXAGON SOCKET 2.6X6					

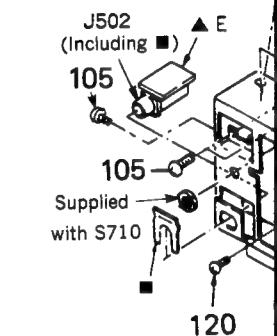
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.  
Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 5-2. FRONT PANEL



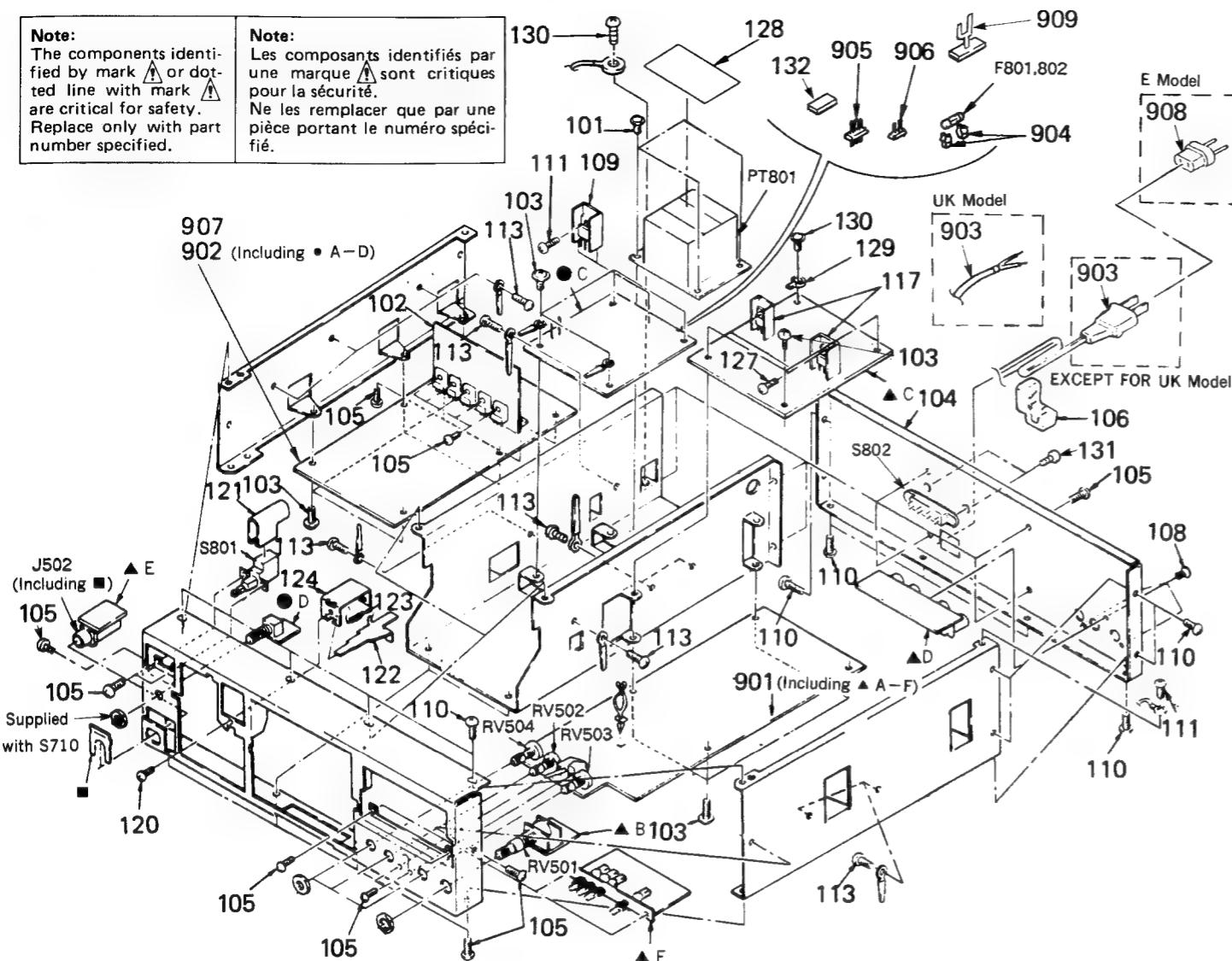
### 5-3. CHASSIS

Note:  
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.



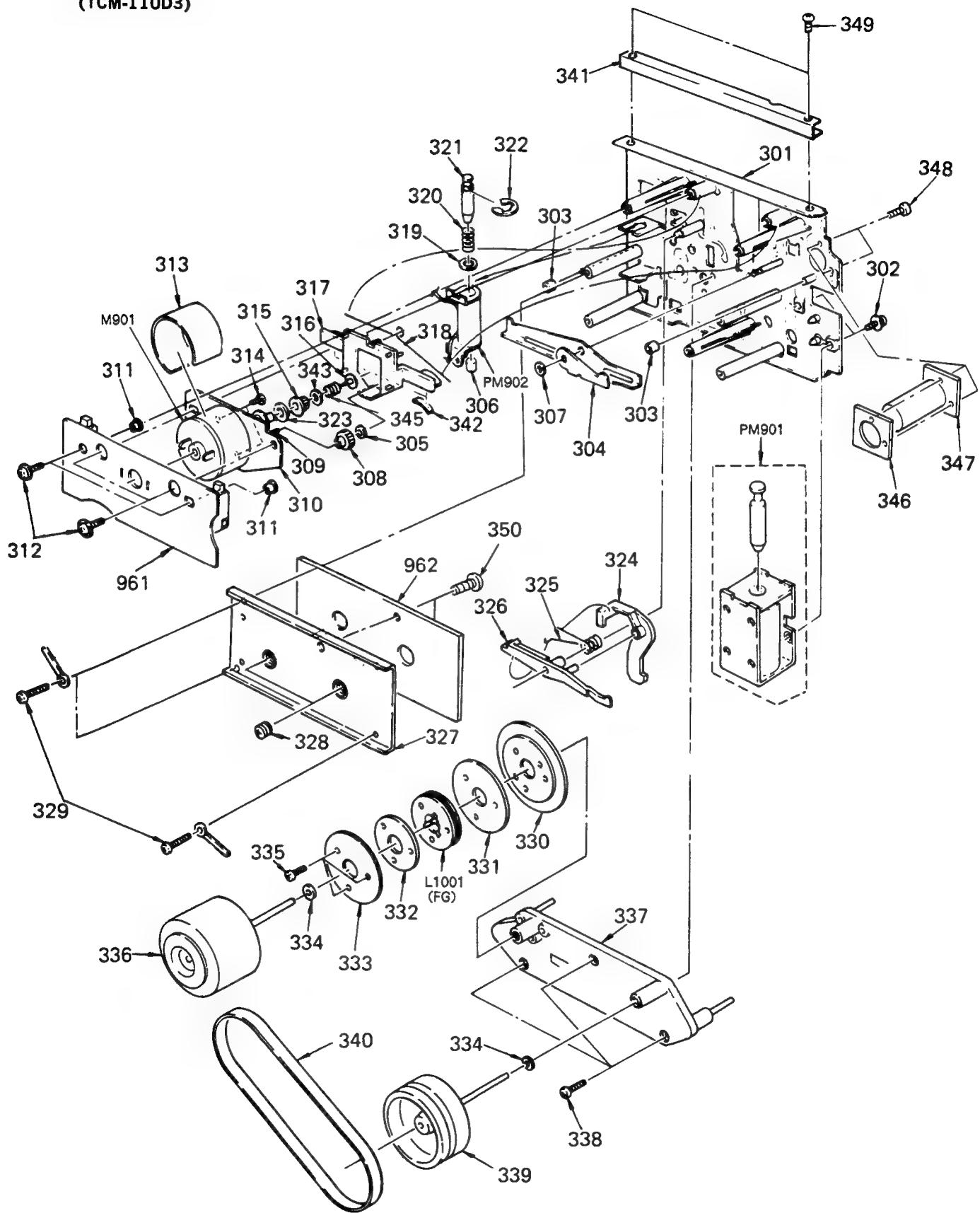
No.	Part No.	Description	Remarks
101	7-682-647-09		
102	*3-304-987-01		
103	4-886-821-01		
104	*3-318-658-11		
105	7-682-547-09		
106	4-916-783-01		
108	3-646-090-11		
109	*4-861-002-00		
110	3-703-685-21		
111	7-682-547-04		
113	7-685-870-01		
117	*4-363-146-00		
120	7-685-861-09		
121	3-575-524-00		
122	*3-318-628-01		
123	3-534-238-XX		
124	*3-575-502-00		
127	7-682-147-15		
128	*3-318-666-01		
129	4-870-539-00		
130	4-886-821-11		
131	7-685-646-79		
132	*3-701-947-13		
901	*A-2010-295-A		

## 5-3. CHASSIS



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	3-575-449-00	LEVER, DETECTION, REC		242	3-537-213-00	SPRING, COMPRESSION	
202	3-575-331-00	LEVER, DETECTION, HALF		243	3-575-481-00	SPRING, TENSION	
203	*3-318-406-11	PLATE, ORNAMENTAL, HEAD		245	3-701-439-11	WASHER	
204	3-575-358-00	SPRING, TENSION		246	3-318-405-01	RETAINER, SPRING	
205	3-575-328-00	HOLDER, LAMP		247	3-571-850-11	SPRING, COMPRESSION	
206	7-671-112-11	BALL, STEEL		248	3-318-438-01	TABLE, REEL	
207	*3-575-378-00	GUIDE, LEAD		249	3-558-708-11	WASHER, STOPPER	
208	3-575-351-00	SPRING		250	3-576-921-00	SPRING, COMPRESSION	
210	3-701-439-21	WASHER		251	3-531-760-00	CLAW, REEL SPINDLE	
211	X-3575-380-1	PINCH LEVER (T) ASSY		252	3-558-339-00	CLAW (R), REEL TABLE	
212	7-624-105-04	STOP RING 2.3, TYPE -E		253	3-576-983-01	CAP, REEL	
213	X-3575-323-0	CHASSIS ASSY, HEAD		254	3-575-459-00	PISTON	
214	*3-304-963-00	RETAINER, LEAD		255	3-575-392-00	RING, PISTON	
215	3-564-121-00	SPRING, COMPRESSION		256	X-3575-310-0	LEVER ASSY, TENSION, BACK	
216	7-671-113-11	BALL, STEEL		257	3-307-381-00	SPRING, TENSION	
217	7-621-775-20	SCREW +B 2.6X5		258	*3-306-279-00	LEVER, ERASING PROTECTION	
218	*3-575-377-00	SPRING		259	*3-306-281-00	SHAFT, DETECTION LEVER	
219	3-575-348-00	ROLLER, GUIDE, THREADING		260	*3-306-282-00	LEVER, REC DETECTION, REVERSE	
220	3-575-355-31	HOLDER, CASSETTE		261	3-318-408-01	SPRING	
221	3-555-114-00	SPRING (LEFT)		262	9-911-815-02	CUSHION	
222	X-3575-399-1	PLATE ASSY, ORNAMENTAL		264	3-575-438-00	LEVER, DETECTION	
223	3-555-113-00	SPRING (RIGHT)		265	3-575-446-00	LEVER, DETECTION, METAL	
224	*X-3575-339-0	PLATE (RIGHT) ASSY, FULCRUM		266	*3-575-440-00	BRACKET, LEVER, DETECTION	
225	7-621-770-87	SCREW +PTT 2.6X5 (S)		267	3-318-433-01	SPRING	
226	7-621-772-10	SCREW +B 2X4		268	3-575-346-01	FELT, BREKE	
227	3-304-639-00	PLATE, SHIELD, HEAD		269	7-624-104-04	STOP RING 2.0, TYPE -E	
228	3-306-215-00	LEVER, FULCRUM, HOLDER		270	7-685-870-01	SCREW +BVTT 3X5 (S)	
229	3-575-356-00	SPRING		271	*X-3575-364-0	BRACKET ASSY, LEVER	
230	3-575-364-00	SPRING, TENSION		272	3-575-448-00	LEVER, LOCK	
231	*X-3575-338-0	PLATE (LEFT) ASSY, FULCRUM		951	*1-608-268-00	PC BOARD, ERASE HEAD	
232	7-621-771-06	SCREW, LOCK		953	*1-603-823-00	PC BOARD, PHOTO	
233	7-621-772-88	SCREW +B 2X16		EH501	1-543-358-11	HEAD, MAGNETIC (ERASE)	
234	7-621-772-20	SCREW +B 2X5		PH501	8-825-770-51	HEAD, REC/PB RPA230-3602C (including RH501)	
235	7-622-205-05	NUT M2 TYPE2		PL1001	1-518-313-00	LAMP, PILOT	
236	*3-306-216-00	BRACKET, HEAD, ERASE					
237	3-564-138-00	GUIDE (S), TAPE					
238	7-684-023-04	N 3, TYPE 2					
239	3-491-191-00	COLLAR					
241	X-3575-321-0	PINCH LEVER (S) ASSY					

## **5-5. MECHANISM SECTION (2) (TCM-110D3)**



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
301	*X-3306-201-1	CHASSIS ASSY, MECHANICAL		328	3-489-073-00	SCREW, THRUST	
302	7-682-649-09	SCREW +PSW 3X10		329	7-682-647-09	SCREW +PS 3X6	
304	*3-306-260-00	LEVER, FWD		330	*3-310-831-01	PLATE, SHIELD, MOTOR	
305	3-558-708-01	WASHER, STOPPER		331	*3-576-810-00	PLATE, RETURN CIRCUIT	
306	3-575-416-11	ARBOR, FIXED		332	3-310-865-00	WASHER, INSULATING	
307	3-558-708-11	WASHER, STOPPER		333	3-576-961-11	PLATE, FG	
308	3-575-332-00	GEAR, FR		334	3-701-438-21	WASHER	
309	3-575-304-00	SHAFT, GEAR, FR		335	7-621-775-60	SCREW +B 2.6X12	
311	3-306-277-00	LIFTER, PC BOARD		336	X-3575-377-1	FLYWHEEL (TAKE-UP) ASSY	
312	7-685-646-79	SCREW, TOTSU PTPWH 3X8, TYPE2		337	X-3575-383-1	BASE ASSY, CAPSTAN	
313	3-306-209-00	PLATE (D), SHIELD, MOTOR		338	7-621-770-87	SCREW +PTT 2.6X5 (S)	
314	7-621-775-10	SCREW +B 2.6X4		339	X-3575-378-1	FLYWHEEL (SUPPLY) ASSY	
315	3-575-324-00	GEAR, LIMITER		340	3-576-812-00	BELT, CAPSTAN	
316	3-575-327-00	STOPPER		341	*3-318-437-01	BRACKET, MD	
317	*X-3575-342-0	PLATE ASSY, BRAKE		342	3-575-469-00	SHOE, BRAKE	
318	3-575-345-00	SPRING		343	3-701-441-11	WASHER	
319	3-701-444-11	WASHER, 6		344	3-701-748-00	CLAMP	
320	3-575-414-00	SPRING, COMPRESSION		345	3-575-487-01	SPRING, COMPRESSION	
321	3-575-415-11	ARBOR, MOVABLE		346	*3-318-439-01	BRACKET	
322	7-624-109-04	STOP RING 5.0, TYPE -E		347	*3-318-440-01	CYLINDER	
323	3-564-027-11	FELT, LIMITER		961	*1-620-542-11	PC BOARD, MD SWITCH	
324	3-575-318-00	LEVER, LOCK, TUNING		962	*1-620-086-11	PC BOARD, CAPSTAN	
325	3-575-458-00	SPRING		M901	X-3575-382-1	MOTOR ASSY, REEL	
326	3-575-460-00	LEVER, SELECT TUNE		PM901	1-454-333-00	SOLENOID, PLUNGER	
327	X-3306-202-1	RETAINER ASSY, THRUST		PM902	1-454-291-00	SOLENOID, PLUNGER	

## SECTION 6

### ELECTRICAL PARTS LIST

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

**CAPACITORS:**MF:  $\mu$ F, PF:  $\mu\mu$ F.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

**COILS**

- MMH: mH, UH:  $\mu$ H

**SEMICONDUCTORS**

In each case, U:  $\mu$ , for example:  
 UA...:  $\mu$ A..., UPA...:  $\mu$ PA...,  
 UPC...:  $\mu$ PC, UPD...:  $\mu$ PD...

The components identified by mark or dotted line with mark are critical for safety.  
 Replace only with part number specified.

Les composants identifiés par une marque sont critiques pour la sécurité.  
 Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
901	*A-2010-295-A	PC BOARD ASSY, AUDIO	C128	1-162-211-31	CERAMIC
902	*A-2056-449-A	(US,Canadian,E) ...PC BOARD ASSY, SYSTEM CONTROL	C129	1-130-475-00	MYLAR
	*A-2056-450-A	(AEP,UK)...PC BOARD ASSY, SYSTEM CONTROL	C130	1-130-475-00	MYLAR
903	.1-555-795-11	(AEP).....CODE, POWER	C131	1-130-478-00	MYLAR
	.1-556-035-00	(UK).....CODE, POWER	C132	1-136-173-00	FILM
	.1-559-297-21	(E).....CODE, POWER	C133	1-136-167-00	FILM
	.1-559-479-11	(US,Canadian)...CODE, POWER	C134	1-136-155-00	FILM
904	.1-533-162-00	HOLDER, FUSE	C135	1-123-380-00	ELECT
905	*1-535-116-00	TERMINAL	C136	1-136-169-00	FILM
906	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	C137	1-136-163-00	FILM
907	*1-620-540-11	PC BOARD, SYSTEM CONTROL	C138	1-136-162-00	FILM
908	.1-526-565-00	(E)...AC PLUG ADAPTOR	C139	1-123-380-00	ELECT
909	1-535-416-01	(AEP,UK)....TERMINAL	C140	1-130-480-00	MYLAR
951	*1-608-268-00	PC BOARD, ERASE HEAD	C141	1-136-153-00	FILM
953	*1-603-823-00	PC BOARD, PHOTO	C142	1-124-929-11	ELECT
961	*1-620-542-11	PC BOARD, MD SWITCH	C143	1-124-929-11	ELECT
962	*1-620-086-11	PC BOARD, CAPSTAN	C144	1-130-473-00	MYLAR
C101	1-130-893-00	FILM	C145	1-136-155-00	FILM
C102	1-124-929-11	ELECT	C146	1-136-160-00	FILM
C103	1-124-929-11	ELECT	C147	1-136-160-00	FILM
C104	1-136-169-00	FILM	C148	1-136-160-00	FILM
C105	1-130-473-00	MYLAR	C149	1-136-156-00	FILM
C106	1-107-165-00	MICA	C150	1-136-160-00	FILM
C107	1-130-478-00	MYLAR	C151	1-136-157-00	FILM
C108	1-109-619-00	MICA	C152	1-130-476-00	MYLAR
C109	1-130-477-00	MYLAR	C153	1-124-929-11	ELECT
C110	1-130-475-00	MYLAR	C154	1-130-473-00	MYLAR
C111	1-130-475-00	MYLAR	C155	1-107-157-00	MICA
C112	1-130-478-00	MYLAR	C156	1-107-157-00	MICA
C113	1-136-173-00	FILM	C157	1-124-767-00	ELECT
C114	1-136-167-00	FILM	C158	1-124-925-11	ELECT
C115	1-136-155-00	FILM	C159	1-124-927-11	ELECT
C116	1-123-380-00	ELECT	C160	1-123-369-00	ELECT
C117	1-136-169-00	FILM	C161	1-107-163-00	MICA
C118	1-136-163-00	FILM	C201	1-130-893-00	FILM
C119	1-136-162-00	FILM	C202	1-124-929-11	ELECT
C120	1-123-380-00	ELECT	C203	1-124-929-11	ELECT
C121	1-130-480-00	MYLAR	C204	1-136-169-00	FILM
C122	1-136-153-00	FILM	C205	1-130-473-00	MYLAR
C123	1-124-929-11	ELECT	C206	1-107-165-00	MICA
C124	1-124-929-11	ELECT	C207	1-130-478-00	MYLAR
C125	1-123-369-00	ELECT	C208	1-109-619-00	MICA
C126	1-124-767-00	ELECT	C209	1-130-477-00	MYLAR
C127	1-107-159-00	MICA	C210	1-130-475-00	MYLAR
			C211	1-130-475-00	MYLAR
			C212	1-130-478-00	MYLAR

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>						
C213	1-136-173-00	FILM	0.47MF	5%	50V	C510	1-162-282-31	CERAMIC	100PF	10%	50V
C214	1-136-167-00	FILM	0.15MF	5%	50V	C511	1-162-282-31	CERAMIC	100PF	10%	50V
C215	1-136-155-00	FILM	0.015MF	5%	50V	C512	1-162-282-31	CERAMIC	100PF	10%	50V
C216	1-123-380-00	ELECT	1MF	20%	50V	C513	1-162-282-31	CERAMIC	100PF	10%	50V
C217	1-136-169-00	FILM	0.22MF	5%	50V	C514	1-124-925-11	ELECT	2.2MF	20%	50V
C218	1-136-163-00	FILM	0.068MF	5%	50V	C515	1-124-915-11	ELECT	10MF	20%	63V
C219	1-136-162-00	FILM	0.056MF	5%	50V	C516	1-124-915-11	ELECT	10MF	20%	63V
C220	1-123-380-00	ELECT	1MF	20%	50V	C517	1-123-333-00	ELECT	100MF	20%	16V
C221	1-130-480-00	MYLAR	0.0056MF	5%	50V	C518	1-123-333-00	ELECT	100MF	20%	16V
C222	1-136-153-00	FILM	0.01MF	5%	50V	C519	1-123-332-00	ELECT	47MF	20%	25V
C223	1-124-929-11	ELECT	22MF	20%	63V	C520	1-123-332-00	ELECT	47MF	20%	25V
C224	1-124-929-11	ELECT	22MF	20%	63V	C521	1-124-477-11	ELECT	47MF	20%	25V
C225	1-123-369-00	ELECT	4.7MF	20%	63V	C523	1-162-294-31	CERAMIC	0.001MF	10%	50V
C226	1-124-767-00	ELECT	2.2MF	20%	50V	C524	1-124-477-11	ELECT	47MF	20%	25V
C227	1-107-159-00	MICA	33PF	5%	500V	C525	1-162-294-31	CERAMIC	0.001MF	10%	50V
C228	1-162-211-31	CERAMIC	33PF	5%	50V	C526	1-162-291-31	CERAMIC	560PF	10%	50V
C229	1-130-475-00	MYLAR	0.0022MF	5%	50V	C527	1-162-291-31	CERAMIC	560PF	10%	50V
C230	1-130-475-00	MYLAR	0.0022MF	5%	50V	C528	1-131-368-00	TANTALUM	3.3MF	20%	16V
C231	1-130-478-00	MYLAR	0.0039MF	5%	50V	C529	1-136-802-11	FILM	0.015MF	5%	100V
C232	1-136-173-00	FILM	0.47MF	5%	50V	C530	1-130-467-00	MYLAR	470PF	5%	50V
C233	1-136-167-00	FILM	0.15MF	5%	50V	C531	1-130-467-00	MYLAR	470PF	5%	50V
C234	1-136-155-00	FILM	0.015MF	5%	50V	C701	1-124-911-11	ELECT	220MF	20%	50V
C235	1-123-380-00	ELECT	1MF	20%	50V	C702	1-124-557-11	ELECT	1000MF	20%	25V
C236	1-136-169-00	FILM	0.22MF	5%	50V	C703	1-124-499-11	ELECT	1MF	20%	50V
C237	1-136-163-00	FILM	0.068MF	5%	50V	C704	1-124-472-11	ELECT	470MF	20%	10V
C238	1-136-162-00	FILM	0.056MF	5%	50V	C705	1-123-875-11	ELECT	10MF	20%	50V
C239	1-123-380-00	ELECT	1MF	20%	50V	C706	1-124-472-11	ELECT	470MF	20%	10V
C240	1-130-480-00	MYLAR	0.0056MF	5%	50V	C707	1-124-477-11	ELECT	47MF	20%	25V
C241	1-136-153-00	FILM	0.01MF	5%	50V	C708	1-162-211-31	CERAMIC	33PF	5%	50V
C242	1-124-929-11	ELECT	22MF	20%	63V	C709	1-124-472-11	ELECT	470MF	20%	10V
C243	1-124-929-11	ELECT	22MF	20%	63V	C710	1-123-875-11	ELECT	10MF	20%	50V
C244	1-130-473-00	MYLAR	0.0015MF	5%	50V	C711	1-124-122-11	ELECT	100MF	20%	35V
C246	1-136-164-00	FILM	0.082MF	5%	50V	C712	1-124-477-11	ELECT	47MF	20%	25V
C247	1-136-155-00	FILM	0.015MF	5%	50V	C713	1-162-203-31	CERAMIC	15PF	5%	50V
C248	1-136-160-00	FILM	0.039MF	5%	50V	C714	1-162-203-31	CERAMIC	15PF	5%	50V
C249	1-136-156-00	FILM	0.018MF	5%	50V	C715	1-136-157-00	FILM	0.022MF	5%	50V
C250	1-136-160-00	FILM	0.039MF	5%	50V	C716	1-124-477-11	ELECT	47MF	20%	25V
C251	1-136-157-00	FILM	0.022MF	5%	50V	C717	1-161-327-00	CERAMIC	0.0033MF	20%	16V
C252	1-130-476-00	MYLAR	0.0027MF	5%	50V	C718	1-161-327-00	CERAMIC	0.0033MF	20%	16V
C253	1-124-929-11	ELECT	22MF	20%	63V	C719	1-162-211-31	CERAMIC	33PF	5%	50V
C254	1-130-473-00	MYLAR	0.0015MF	5%	50V	C720	1-162-211-31	CERAMIC	33PF	5%	50V
C255	1-107-157-00	MICA	27PF	5%	500V	C721	1-124-443-00	ELECT	100MF	20%	10V
C256	1-107-157-00	MICA	27PF	5%	500V	C722	1-124-443-00	ELECT	100MF	20%	10V
C257	1-124-767-00	ELECT	2.2MF	20%	50V	C723	1-162-284-31	CERAMIC	150PF	10%	50V
C258	1-124-925-11	ELECT	2.2MF	20%	50V	C724	1-162-284-31	CERAMIC	150PF	10%	50V
C259	1-124-927-11	ELECT	4.7MF	20%	50V	C725	1-162-294-31	CERAMIC	0.001MF	10%	50V
C260	1-123-369-00	ELECT	4.7MF	20%	63V	C726	1-124-477-11	ELECT	47MF	20%	25V
C261	1-107-163-00	MICA	47PF	5%	500V	C727	1-124-443-00	ELECT	100MF	20%	10V
C501	1-123-377-00	ELECT	470MF	20%	63V	C728	1-136-159-00	FILM	0.033MF	5%	50V
C502	1-123-377-00	ELECT	470MF	20%	63V	C795	1-162-294-31	CERAMIC	0.001MF	10%	50V
C503	1-123-378-00	ELECT	1000MF	20%	63V	C801	1-161-744-00	CERAMIC	0.01MF		400V
C504	1-123-378-00	ELECT	1000MF	20%	63V	C802	1-123-875-11	ELECT	10MF	20%	50V
C505	1-124-915-11	ELECT	10MF	20%	63V	C803	1-124-499-11	ELECT	1MF	20%	50V
C506	1-124-915-11	ELECT	10MF	20%	63V	C804	1-124-911-11	ELECT	220MF	20%	50V
C507	1-123-875-11	ELECT	10MF	20%	50V	C805	1-124-637-11	ELECT	1000MF	20%	50V
C508	1-123-875-11	ELECT	10MF	20%	50V	C806	1-124-636-00	ELECT	3300MF	20%	25V
C509	1-123-875-11	ELECT	10MF	20%	50V	C807	1-123-875-11	ELECT	10MF	20%	50V

Ref.No.	Part No.	Description			Ref.No.	Part No.	Description
C808	1-124-122-11	ELECT	100MF	20%	D513	8-719-114-29	DIODE RD5.1JS
C809	1-126-129-11	ELECT	6800MF	20%	D514	8-719-933-71	DIODE HZS11C3L
C810	1-126-129-11	ELECT	6800MF	20%	D515	8-719-933-71	DIODE HZS11C3L
C811	1-136-165-00	FILM	0.1MF	5%	D516	8-719-114-29	DIODE RD5.1JS
C812	1-136-177-00	FILM	1MF	5%	D701	8-719-933-41	DIODE HZS6C3L
C821	1-124-443-00	ELECT	100MF	20%	D702	8-719-933-57	DIODE HZS9B1L
C901	1-163-059-00	CERAMIC CHIP	0.01MF	10%	D703	8-719-933-36	DIODE HZS6B1L
C902	1-163-063-00	CERAMIC CHIP	0.022MF	10%	D704	8-719-934-13	DIODE HZS24-1L
C903	1-163-063-00	CERAMIC CHIP	0.022MF	10%	D705	8-719-114-29	DIODE RD5.1JSB1
C904	1-163-077-00	CERAMIC CHIP	0.1MF		D706	8-719-200-77	DIODE 10E2N
C905	1-124-779-00	ELECT CHIP	10MF	20%	D707	8-719-200-77	DIODE 10E2N
C906	1-135-091-00	TANTAL. CHIP	1MF	10%	D708	8-719-200-77	DIODE 10E2N
C907	1-163-077-00	CERAMIC CHIP	0.1MF		D709	8-719-900-79	DIODE BG5628S (►)
C908	1-163-077-00	CERAMIC CHIP	0.1MF		D710	8-719-956-28	DIODE BR5628S (■)
C909	1-163-077-00	CERAMIC CHIP	0.1MF		D711	8-719-913-47	DIODE EAA5638S (●)
C910	1-163-063-00	CERAMIC CHIP	0.022MF	10%	D712	8-719-912-29	DIODE ISS120
C911	1-124-779-00	ELECT CHIP	10MF	20%	D713	8-719-114-29	DIODE RD5.1JSB1
C1001	1-123-875-11	ELECT	10MF	20%	D714	8-719-912-20	DIODE ISS120
C1002	1-123-875-11	ELECT	10MF	20%	D801	8-719-114-19	DIODE RD5.1JSB1
CN501	*1-560-062-00	PIN, CONNECTOR 4P			D802	8-719-912-20	DIODE ISS120
CN502	*1-564-507-11	PLUG, CONNECTOR 4P			D803	8-719-504-60	DIODE S2VB20
CN503	*1-564-506-11	PLUG, CONNECTOR 3P			D804	8-719-200-77	DIODE 10E2N
CN504	*1-560-062-00	PIN, CONNECTOR 4P			D805	8-719-200-77	DIODE 10E2N
CN505	*1-560-061-00	PIN, CONNECTOR 3P			D806	8-719-934-18	DIODE HZS27-2L
CN506	*1-564-338-61	PIN, CONNECTOR 4P			D807	8-719-230-02	DIODE 30D4
CN507	*1-564-340-00	PIN, CONNECTOR 6P			D808	8-719-230-02	DIODE 30D4
CN508	*1-564-340-71	PIN, CONNECTOR 6P			D809	8-719-230-02	DIODE 30D4
CN509	*1-564-338-00	PIN, CONNECTOR 4P			D810	8-719-230-02	DIODE 30D4
CN510	*1-564-338-71	PIN, CONNECTOR 4P			D1001	8-719-107-94	DIODE ISS132
CN511	*1-564-338-81	PIN, CONNECTOR 4P			D1002	8-719-107-94	DIODE ISS132
CN512	*1-564-339-00	PIN, CONNECTOR 5P			EH501	1-543-358-11	HEAD, MAGNETIC (ERASE)
CN701	*1-564-508-11	PLUG, CONNECTOR 5P			F801	A.1-532-259-00	(AEP,UK,E).....FUSE, TIME-LAG (1.6A)
CN702	*1-564-337-00	PIN, CONNECTOR 3P			F801	A.1-532-742-11	(US,Canadian)...FUSE, GLASS TUBE (1.6A)
CN703	*1-564-336-00	PIN, CONNECTOR 2P			F802	A.1-532-259-00	(AEP,UK,E).....FUSE, TIME-LAG (1.6A)
CN704	*1-564-340-00	PIN, CONNECTOR 6P			F802	A.1-532-742-11	(US,Canadian)...FUSE, GLASS TUBE (1.6A)
CN705	*1-564-339-61	PIN, CONNECTOR 5P			FL501	1-519-497-11	INDICATOR TUBE, FLUORESCENT
CN706	*1-564-339-00	PIN, CONNECTOR 5P			FL701	1-519-409-11	INDICATOR TUBE, FLUORESCENT (COUNTER)
CN707	*1-564-338-61	PIN, CONNECTOR 4P			H901	8-719-403-79	OH009-TW
CN708	*1-564-338-00	PIN, CONNECTOR 4P			H902	8-719-403-79	OH009-TW
CN709	*1-564-337-61	PIN, CONNECTOR 3P			H903	8-719-403-79	OH009-TW
CN710	*1-564-342-11	PIN, CONNECTOR 8P			IC501	8-759-604-38	IC M5F78M10
CN711	*1-564-341-11	PIN, CONNECTOR 7P			IC502	8-759-604-44	IC M5F79M10
CN712	*1-564-507-11	PLUG, CONNECTOR 4P			IC503	8-759-602-01	IC M5220P
CP501	1-466-045-11	OSCILLATION UNIT, BIAS			IC504	8-752-018-80	IC CX20188
CT501	1-141-225-00	CAP, TUNING, TRIMAR			IC505	8-759-602-83	IC M5238P
D501	8-719-933-47	DIODE HZS7B2L			IC506	8-752-018-80	IC CX20188
D502	8-719-933-71	DIODE HZS11C3L			IC507	8-759-981-96	IC RC4560D
D503	8-719-912-20	DIODE ISS120			IC508	8-759-981-96	IC RC4560D
D504	8-719-912-20	DIODE ISS120			IC509	8-759-145-58	IC UPC4558C
D505	8-719-912-20	DIODE ISS120			IC510	8-759-961-38	IC BA6138
D506	8-719-912-20	DIODE ISS120			IC511	8-759-982-26	IC RC78L12A
D507	8-719-912-20	DIODE ISS120			IC512	8-759-904-72	IC MSL9359RS
D508	8-719-912-20	DIODE ISS120			IC701	8-759-938-34	IC MB88517B-228N
D509	8-719-912-20	DIODE ISS120			IC702	8-759-602-47	IC M50761-417P
D510	8-719-912-20	DIODE ISS120			IC703	8-759-601-45	IC M4069UBP
D511	8-719-912-20	DIODE ISS120					
D512	8-719-912-20	DIODE ISS120					

**Note:**  
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>
IC704	8-759-201-58	IC TC9142P	Q504	8-729-900-36	TRANSISTOR DTC124ES
IC705	8-741-138-70	IC BX-1387	Q505	8-729-900-36	TRANSISTOR DTC124ES
IC706	8-759-905-48	IC MSL9512RS	Q506	8-729-900-36	TRANSISTOR DTC124ES
IC901	8-759-100-96	IC UPC4558G2	Q507	8-729-900-36	TRANSISTOR DTC124ES
IC902	8-752-017-40	IC CX20174	Q508	8-729-281-53	TRANSISTOR 2SC1815GR
J501	1-507-531-31	PLATE, PIN-JACK (LINE IN/OUT)	Q509	8-729-281-53	TRANSISTOR 2SC1815GR
J502	1-507-796-71	JACK (HEADPHONES)	Q510	8-729-178-54	TRANSISTOR 2SC2785
JR901	1-216-296-00	METAL GLAZE 0 5% 1/8W	Q511	8-729-900-63	TRANSISTOR DTA124ES
JR902	1-216-296-00	METAL GLAZE 0 5% 1/8W	Q512	8-729-900-36	TRANSISTOR DTC144ES
JR903	1-216-296-00	METAL GLAZE 0 5% 1/8W	Q513	8-729-117-54	TRANSISTOR 2SA1175
JR904	1-216-296-00	METAL GLAZE 0 5% 1/8W	Q514	8-729-178-54	TRANSISTOR 2SC2785
JR905	1-216-296-00	METAL GLAZE 0 5% 1/8W	Q515	8-729-900-65	TRANSISTOR DTA144ES
L101	1-408-924-00	INDUCTOR 10MMH	Q516	8-729-900-65	TRANSISTOR DTA144ES
L102	1-408-925-11	INDUCTOR 12MMH	Q517	8-729-900-65	TRANSISTOR DTA144ES
L103	1-408-920-00	INDUCTOR 4.7MMH	Q518	8-729-900-65	TRANSISTOR DTA144ES
L104	1-408-918-11	INDUCTOR 3.3MMH	Q519	8-729-900-65	TRANSISTOR DTA144ES
L105	1-408-916-11	INDUCTOR 2.2MMH	Q520	8-729-900-65	TRANSISTOR DTA144ES
L106	1-408-925-11	INDUCTOR 12MMH	Q521	8-729-900-89	TRANSISTOR DTC144ES
L201	1-408-924-00	INDUCTOR 10MMH	Q701	8-729-107-25	TRANSISTOR 2SD1585-L
L202	1-408-925-11	INDUCTOR 12MMH	Q702	8-729-107-25	TRANSISTOR 2SD1585-L
L203	1-408-920-00	INDUCTOR 4.7MMH	Q703	8-729-107-25	TRANSISTOR 2SD1585-L
L204	1-408-918-11	INDUCTOR 3.3MMH	Q704	8-729-107-25	TRANSISTOR 2SD1585-L
L205	1-408-916-11	INDUCTOR 2.2MMH	Q705	8-729-107-25	TRANSISTOR 2SD1585-L
L206	1-408-925-11	INDUCTOR 12MMH	Q706	8-729-178-54	TRANSISTOR 2SC2785
L501	1-410-525-11	INDUCTOR 220UH	Q707	8-729-178-54	TRANSISTOR 2SC2785
L502	1-410-525-11	INDUCTOR 220UH	Q708	8-729-178-54	TRANSISTOR 2SC2785
L503	1-410-525-11	INDUCTOR 220UH	Q709	8-729-178-54	TRANSISTOR 2SC2785
L1001	1-459-426-00	COIL (FG)	Q710	8-729-178-54	TRANSISTOR 2SC2785
LPF101	1-236-087-11	FILTER, LOW PASS	Q711	8-729-802-34	TRANSISTOR 2SD1388
LPF201	1-236-087-11	FILTER, LOW PASS	Q712	8-729-900-80	TRANSISTOR DTC114ES
M901	X-3575-382-1	MOTOR ASSY, REEL	Q713	8-729-802-34	TRANSISTOR 2SD1388
PH501	8-825-770-51	HEAD, REC/PB RPA230-3602C (including RH501)	Q714	8-729-900-80	TRANSISTOR DTC144ES
PL1001	1-518-313-00	LAMP, PILOT	Q715	8-729-802-22	TRANSISTOR 2SB1014
PM901	1-454-333-00	SOLENOID, PLUNGER	Q716	8-729-802-22	TRANSISTOR 2SB1014
PM902	1-454-291-00	SOLENOID, PLUNGER	Q717	8-729-900-80	TRANSISTOR DTC144ES
PT801A	1-448-948-11	{US,Canadian}...TRANSFORMER, POWER	Q718	8-729-801-93	TRANSISTOR 2SD1387
PT801A	1-448-949-11	(AEP,UK).....TRANSFORMER, POWER	Q719	8-729-801-93	TRANSISTOR 2SD1387
PT801A	1-449-005-11	(E).....TRANSFORMER, POWER	Q720	8-729-801-83	TRANSISTOR 2SB1013
Q101	8-729-107-84	TRANSISTOR 2SC3623A-L	Q721	8-729-801-83	TRANSISTOR 2SB1013
Q102	8-729-102-04	TRANSISTOR 2SD1020-F	Q722	8-729-900-61	TRANSISTOR DTA114ES
Q103	8-729-107-84	TRANSISTOR 2SC3623A-L	Q801	8-729-180-92	TRANSISTOR 2SD809-K
Q104	8-729-107-84	TRANSISTOR 2SC3623A-L	Q1001	8-729-110-22	TRANSISTOR PH102
Q105	8-729-107-84	TRANSISTOR 2SC3623A-L	Q1002	8-729-110-22	TRANSISTOR PH102
Q106	8-729-107-84	TRANSISTOR 2SC3623A-L	R101	1-249-466-11	CARBON 56K 5% 1/4W
Q201	8-729-107-84	TRANSISTOR 2SC3623A-L	R102	1-249-652-11	CARBON 130 5% 1/2W
Q202	8-729-102-04	TRANSISTOR 2SD1020-F	R103	1-249-602-11	CARBON 120K 5% 1/4W
Q203	8-729-107-84	TRANSISTOR 2SC3623A-L	R104	1-247-255-00	CARBON 4.3K 5% 1/2W
Q204	8-729-107-84	TRANSISTOR 2SC3623A-L	R105	1-249-537-11	CARBON 240 5% 1/4W
Q205	8-729-107-84	TRANSISTOR 2SC3623A-L	R106	1-249-539-11	CARBON 300 5% 1/4W
Q206	8-729-107-84	TRANSISTOR 2SC3623A-L	R107	1-249-429-11	CARBON 10K 5% 1/4W
Q501	8-729-900-63	TRANSISTOR DTA124ES	R108	1-247-717-11	CARBON 2.2K 5% 1/4W
Q502	8-729-900-89	TRANSISTOR DTC144ES	R109	1-249-928-11	CARBON 1.6K 5% 1/4W
Q503	8-729-900-36	TRANSISTOR DTC124ES	R110	1-247-749-11	CARBON 560 5% 1/2W
			R111	1-247-764-11	CARBON 10K 5% 1/2W
			R112	1-247-146-00	CARBON 4.3K 5% 1/4W

**Note:**  
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# TC-K333ESR/K730ES

Ref.No.	Part No.	Description				Ref.No.	Part No.	Description			
R113	1-247-142-00	CARBON	3K	5%	1/4W	R170	1-249-421-11	CARBON	2.2K	5%	1/4W
R114	1-246-545-00	CARBON	1M	5%	1/4W	R171	1-249-397-11	CARBON	22	5%	1/4W
R115	1-249-917-11	CARBON	560	1%	1/4W	R172	1-247-883-00	CARBON	150K	5%	1/4W
R116	1-247-193-00	CARBON	22K	1%	1/4W	R173	1-249-429-11	CARBON	10K	5%	1/4W
R117	1-247-152-00	CARBON	7.5K	5%	1/4W	R174	1-247-725-11	CARBON	10K	5%	1/4W
R118	1-247-711-11	CARBON	680	5%	1/4W	R175	1-249-441-11	CARBON	100K	5%	1/4W
R119	1-247-154-00	CARBON	9.1K	5%	1/4W	R201	1-249-466-11	CARBON	56K	5%	1/4W
R120	1-249-465-11	CARBON	47K	5%	1/4W	R202	1-249-652-11	CARBON	130	5%	1/2W
R121	1-249-490-11	CARBON	27K	5%	1/2W	R203	1-249-602-11	CARBON	120K	5%	1/4W
R122	1-249-824-11	CARBON	8.2K	5%	1/2W	R204	1-247-255-00	CARBON	4.3K	5%	1/2W
R123	1-249-469-11	CARBON	100K	5%	1/4W	R205	1-249-537-11	CARBON	240	5%	1/4W
R124	1-247-723-11	CARBON	6.8K	5%	1/4W	R206	1-249-539-11	CARBON	300	5%	1/4W
R125	1-247-720-11	CARBON	3.9K	5%	1/4W	R207	1-249-429-11	CARBON	10K	5%	1/4W
R126	1-247-719-11	CARBON	3.3K	5%	1/4W	R208	1-247-717-11	CARBON	2.2K	5%	1/4W
R127	1-247-152-00	CARBON	7.5K	5%	1/4W	R209	1-249-928-11	CARBON	1.6K	5%	1/4W
R128	1-249-469-11	CARBON	100K	5%	1/4W	R210	1-247-749-11	CARBON	560	5%	1/2W
R129	1-247-747-11	CARBON	470	5%	1/2W	R211	1-247-764-11	CARBON	10K	5%	1/2W
R130	1-247-764-11	CARBON	10K	5%	1/2W	R212	1-247-146-00	CARBON	4.3K	5%	1/4W
R131	1-247-146-00	CARBON	4.3K	5%	1/4W	R213	1-247-142-00	CARBON	3K	5%	1/4W
R132	1-247-142-00	CARBON	3K	5%	1/4W	R214	1-246-545-00	CARBON	1M	5%	1/4W
R133	1-246-545-00	CARBON	1M	5%	1/4W	R215	1-249-917-11	CARBON	560	1%	1/4W
R134	1-249-917-11	CARBON	560	1%	1/4W	R216	1-247-193-00	CARBON	22K	1%	1/4W
R135	1-247-193-00	CARBON	22K	1%	1/4W	R217	1-247-152-00	CARBON	7.5K	5%	1/4W
R136	1-247-152-00	CARBON	7.5K	5%	1/4W	R218	1-247-711-11	CARBON	680	5%	1/4W
R137	1-247-711-11	CARBON	680	5%	1/4W	R219	1-247-154-00	CARBON	9.1K	5%	1/4W
R138	1-247-154-00	CARBON	9.1K	5%	1/4W	R220	1-249-465-11	CARBON	47K	5%	1/4W
R139	1-249-465-11	CARBON	47K	5%	1/4W	R221	1-249-490-11	CARBON	27K	5%	1/2W
R140	1-247-721-11	CARBON	4.7K	5%	1/4W	R222	1-249-824-11	CARBON	8.2K	5%	1/2W
R141	1-249-461-11	CARBON	18K	5%	1/4W	R223	1-249-469-11	CARBON	100K	5%	1/4W
R142	1-247-719-11	CARBON	3.3K	5%	1/4W	R224	1-247-723-11	CARBON	6.8K	5%	1/4W
R143	1-247-723-11	CARBON	6.8K	5%	1/4W	R225	1-247-720-11	CARBON	3.9K	5%	1/4W
R144	1-249-425-11	CARBON	4.7K	5%	1/4W	R226	1-247-719-11	CARBON	3.3K	5%	1/4W
R145	1-249-590-11	CARBON	39K	5%	1/4W	R227	1-247-152-00	CARBON	7.5K	5%	1/4W
R146	1-249-429-11	CARBON	10K	5%	1/4W	R228	1-249-469-11	CARBON	100K	5%	1/4W
R147	1-249-469-11	CARBON	100K	5%	1/4W	R229	1-247-747-11	CARBON	470	5%	1/2W
R148	1-249-459-11	CARBON	12K	5%	1/4W	R230	1-247-764-11	CARBON	10K	5%	1/2W
R149	1-247-717-11	CARBON	2.2K	5%	1/4W	R231	1-247-146-00	CARBON	4.3K	5%	1/4W
R150	1-249-466-11	CARBON	56K	5%	1/4W	R232	1-247-142-00	CARBON	3K	5%	1/4W
R151	1-249-590-11	CARBON	39K	5%	1/4W	R233	1-246-545-00	CARBON	1M	5%	1/4W
R152	1-247-703-11	CARBON	180	5%	1/4W	R234	1-249-917-11	CARBON	560	1%	1/4W
R153	1-249-459-11	CARBON	12K	5%	1/4W	R235	1-247-193-00	CARBON	22K	1%	1/4W
R154	1-247-700-11	CARBON	100	5%	1/4W	R236	1-247-152-00	CARBON	7.5K	5%	1/4W
R155	1-247-142-00	CARBON	3K	5%	1/4W	R237	1-247-711-11	CARBON	680	5%	1/4W
R156	1-247-721-11	CARBON	4.7K	5%	1/4W	R238	1-247-154-00	CARBON	9.1K	5%	1/4W
R157	1-249-429-11	CARBON	10K	5%	1/4W	R239	1-249-465-11	CARBON	47K	5%	1/4W
R158	1-249-429-11	CARBON	10K	5%	1/4W	R240	1-247-721-11	CARBON	4.7K	5%	1/4W
R159	1-247-700-11	CARBON	100	5%	1/4W	R241	1-249-461-11	CARBON	18K	5%	1/4W
R160	1-247-718-11	CARBON	2.7K	5%	1/4W	R242	1-247-719-11	CARBON	3.3K	5%	1/4W
R161	1-247-720-11	CARBON	3.9K	5%	1/4W	R243	1-247-723-11	CARBON	6.8K	5%	1/4W
R162	1-249-429-11	CARBON	10K	5%	1/4W	R244	1-249-425-11	CARBON	4.7K	5%	1/4W
R163	1-247-718-11	CARBON	2.7K	5%	1/4W	R245	1-249-590-11	CARBON	39K	5%	1/4W
R164	1-247-714-11	CARBON	1.2K	5%	1/4W	R246	1-249-429-11	CARBON	10K	5%	1/4W
R165	1-247-721-11	CARBON	4.7K	5%	1/4W	R247	1-249-469-11	CARBON	100K	5%	1/4W
R166	1-249-461-11	CARBON	18K	5%	1/4W	R248	1-249-459-11	CARBON	12K	5%	1/4W
R167	1-249-469-11	CARBON	100K	5%	1/4W	R249	1-247-717-11	CARBON	2.2K	5%	1/4W
R168	1-247-704-11	CARBON	220	5%	1/4W	R250	1-249-466-11	CARBON	56K	5%	1/4W
R169	1-247-749-11	CARBON	560	5%	1/2W	R251	1-249-590-11	CARBON	39K	5%	1/4W

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>				
R252	1-247-703-11	CARBON	180	5%	1/4W	R534	1-249-441-11	CARBON	100K	5%	1/4W
R253	1-249-459-11	CARBON	12K	5%	1/4W	R535	1-249-441-11	CARBON	100K	5%	1/4W
R254	1-247-700-11	CARBON	100	5%	1/4W	R536	1-249-441-11	CARBON	100K	5%	1/4W
R255	1-247-142-00	CARBON	3K	5%	1/4W	R537	1-249-441-11	CARBON	100K	5%	1/4W
R256	1-247-721-11	CARBON	4.7K	5%	1/4W	R538	1-249-441-11	CARBON	100K	5%	1/4W
R257	1-249-429-11	CARBON	10K	5%	1/4W	R539	1-249-441-11	CARBON	100K	5%	1/4W
R258	1-249-429-11	CARBON	10K	5%	1/4W	R540	1-249-441-11	CARBON	100K	5%	1/4W
R259	1-247-700-11	CARBON	100	5%	1/4W	R541	1-249-441-11	CARBON	100K	5%	1/4W
R260	1-247-718-11	CARBON	2.7K	5%	1/4W	R542	1-249-410-11	CARBON	270	5%	1/4W
R261	1-247-720-11	CARBON	3.9K	5%	1/4W	R543	1-249-410-11	CARBON	270	5%	1/4W
R262	1-249-429-11	CARBON	10K	5%	1/4W	R544	1-247-887-00	CARBON	220K	5%	1/4W
R263	1-247-718-11	CARBON	2.7K	5%	1/4W	R545	1-249-432-11	CARBON	18K	5%	1/4W
R264	1-247-714-11	CARBON	1.2K	5%	1/4W	R546	1-249-429-11	CARBON	10K	5%	1/4W
R265	1-247-721-11	CARBON	4.7K	5%	1/4W	R547	1-249-429-11	CARBON	10K	5%	1/4W
R266	1-249-461-11	CARBON	18K	5%	1/4W	R548	1-249-405-11	CARBON	100	5%	1/4W
R267	1-249-469-11	CARBON	100K	5%	1/4W	R549	1-249-405-11	CARBON	100	5%	1/4W
R268	1-247-704-11	CARBON	220	5%	1/4W	R550	1-249-405-11	CARBON	100	5%	1/4W
R269	1-247-749-11	CARBON	560	5%	1/2W	R551	1-249-405-11	CARBON	100	5%	1/4W
R270	1-249-421-11	CARBON	2.2K	5%	1/4W	R552	1-249-405-11	CARBON	100	5%	1/4W
R271	1-249-397-11	CARBON	22	5%	1/4W	R553	1-249-405-11	CARBON	100	5%	1/4W
R272	1-247-883-00	CARBON	150K	5%	1/4W	R554	1-249-405-11	CARBON	100	5%	1/4W
R273	1-249-429-11	CARBON	10K	5%	1/4W	R555	1-249-405-11	CARBON	100	5%	1/4W
R274	1-247-725-11	CARBON	10K	5%	1/4W	R556	1-249-405-11	CARBON	100	5%	1/4W
R275	1-249-441-11	CARBON	100K	5%	1/4W	R557	1-249-405-11	CARBON	100	5%	1/4W
R501	1-249-433-11	CARBON	22K	5%	1/4W	R701	1-247-721-11	CARBON	4.7K	5%	1/4W
R502	1-215-472-00	METAL	130K	1%	1/6W	R702	1-249-437-11	CARBON	47K	5%	1/4W
R503	1-249-429-11	CARBON	10K	5%	1/4W	R703	1-249-421-11	CARBON	2.2K	5%	1/4W
R504	1-215-472-00	METAL	130K	1%	1/6W	R704	1-247-717-11	CARBON	2.2K	5%	1/4W
R505	1-249-429-11	CARBON	10K	5%	1/4W	R705	1-249-437-11	CARBON	47K	5%	1/4W
R506	1-249-438-11	CARBON	56K	5%	1/4W	R706	1-249-421-11	CARBON	2.2K	5%	1/4W
R507	1-249-433-11	CARBON	22K	5%	1/4W	R707	1-247-717-11	CARBON	2.2K	5%	1/4W
R508	1-249-421-11	CARBON	2.2K	5%	1/4W	R708	1-247-717-11	CARBON	2.2K	5%	1/4W
R509	1-249-429-11	CARBON	10K	5%	1/4W	R709	1-249-437-11	CARBON	47K	5%	1/4W
R510	1-249-438-11	CARBON	56K	5%	1/4W	R710	1-249-421-11	CARBON	2.2K	5%	1/4W
R511	1-249-438-11	CARBON	56K	5%	1/4W	R711	1-247-708-11	CARBON	470	5%	1/4W
R512	1-249-438-11	CARBON	56K	5%	1/4W	R712	1-247-713-11	CARBON	1K	5%	1/4W
R513	1-249-433-11	CARBON	22K	5%	1/4W	R713	1-247-717-11	CARBON	2.2K	5%	1/4W
R514	1-249-438-11	CARBON	56K	5%	1/4W	R714	1-249-437-11	CARBON	47K	5%	1/4W
R515	1-249-429-11	CARBON	10K	5%	1/4W	R715	1-249-421-11	CARBON	2.2K	5%	1/4W
R516	1-249-433-11	CARBON	22K	5%	1/4W	R716	1-247-721-11	CARBON	4.7K	5%	1/4W
R517	1-249-437-11	CARBON	47K	5%	1/4W	R717	1-247-891-00	CARBON	330K	5%	1/4W
R518	1-249-438-11	CARBON	56K	5%	1/4W	R718	1-249-441-11	CARBON	100K	5%	1/4W
R519	1-247-862-11	CARBON	20K	5%	1/4W	R719	1-249-417-11	CARBON	1K	5%	1/4W
R520	1-247-848-11	CARBON	5.1K	5%	1/4W	R720	1-249-417-11	CARBON	1K	5%	1/4W
R521	1-249-425-11	CARBON	4.7K	5%	1/4W	R721	1-249-429-11	CARBON	10K	5%	1/4W
R522	1-247-846-11	CARBON	4.3K	5%	1/4W	R722	1-247-717-11	CARBON	2.2K	5%	1/4W
R523	1-249-425-11	CARBON	4.7K	5%	1/4W	R723	1-249-437-11	CARBON	47K	5%	1/4W
R524	1-249-417-11	CARBON	1K	5%	1/4W	R724	1-247-729-11	CARBON	15	5%	1/2W
R525	1-249-437-11	CARBON	47K	5%	1/4W	R725	1-249-429-11	CARBON	10K	5%	1/4W
R526	1-249-433-11	CARBON	22K	5%	1/4W	R726	1-247-717-11	CARBON	2.2K	5%	1/4W
R527	1-247-700-11	CARBON	100	5%	1/4W	R727	1-249-437-11	CARBON	47K	5%	1/4W
R528	1-247-700-11	CARBON	100	5%	1/4W	R728	1-249-429-11	CARBON	10K	5%	1/4W
R529	1-249-429-11	CARBON	10K	5%	1/4W	R729	1-249-417-11	CARBON	1K	5%	1/4W
R530	1-249-437-11	CARBON	47K	5%	1/4W	R730	1-249-417-11	CARBON	1K	5%	1/4W
R531	1-247-700-11	CARBON	100	5%	1/4W	R731	1-249-429-11	CARBON	10K	5%	1/4W
R532	1-247-700-11	CARBON	100	5%	1/4W	R732	1-249-417-11	CARBON	1K	5%	1/4W
R533	1-249-433-11	CARBON	22K	5%	1/4W	R733	1-249-429-11	CARBON	10K	5%	1/4W

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>				
R734	1-249-417-11	CARBON	1K	5%	1/4W	
R735	1-249-429-11	CARBON	10K	5%	1/4W	
R736	1-247-711-11	CARBON	680	5%	1/4W	
R737	1-247-715-11	CARBON	1.5K	5%	1/4W	
R738	△.1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R739	1-249-437-11	CARBON	47K	5%	1/4W	
R740	1-249-437-11	CARBON	47K	5%	1/4W	
R741	1-247-883-00	CARBON	150K	5%	1/4W	
R742	1-247-883-00	CARBON	150K	5%	1/4W	
R743	1-249-417-11	CARBON	1K	5%	1/4W	
R744	1-249-433-11	CARBON	22K	5%	1/4W	
R745	1-249-433-11	CARBON	22K	5%	1/4W	
R746	1-249-433-11	CARBON	22K	5%	1/4W	
R747	1-249-433-11	CARBON	22K	5%	1/4W	
R748	1-249-417-11	CARBON	1K	5%	1/4W	
R749	1-249-417-11	CARBON	1K	5%	1/4W	
R750	1-249-430-11	CARBON	12K	5%	1/4W	
R751	1-249-430-11	CARBON	12K	5%	1/4W	
R752	1-249-433-11	CARBON	22K	5%	1/4W	
R753	1-249-433-11	CARBON	22K	5%	1/4W	
R754	1-249-433-11	CARBON	22K	5%	1/4W	
R755	1-249-433-11	CARBON	22K	5%	1/4W	
R756	1-249-433-11	CARBON	22K	5%	1/4W	
R757	1-249-433-11	CARBON	22K	5%	1/4W	
R758	1-249-433-11	CARBON	22K	5%	1/4W	
R759	1-249-441-11	CARBON	100K	5%	1/4W	
R760	1-249-429-11	CARBON	10K	5%	1/4W	
R761	1-249-413-11	CARBON	470	5%	1/4W	
R762	1-249-413-11	CARBON	470	5%	1/4W	
R763	1-249-413-11	CARBON	470	5%	1/4W	
R764	1-249-413-11	CARBON	470	5%	1/4W	
R765	1-249-409-11	CARBON	220	5%	1/4W	
R766	1-249-413-11	CARBON	470	5%	1/4W	
R767	1-249-410-11	CARBON	270	5%	1/4W	
R768	1-249-417-11	CARBON	1K	5%	1/4W	
R769	1-249-417-11	CARBON	1K	5%	1/4W	
R770	1-249-432-11	CARBON	18K	5%	1/4W	
R771	1-249-430-11	CARBON	12K	5%	1/4W	
R772	1-249-433-11	CARBON	22K	5%	1/4W	
R773	1-249-422-11	CARBON	2.7K	5%	1/4W	
R774	1-247-903-00	CARBON	1M	5%	1/4W	
R775	1-249-433-11	CARBON	22K	5%	1/4W	
R776	1-249-429-11	CARBON	10K	5%	1/4W	
R777	1-249-426-11	CARBON	5.6K	5%	1/4W	
R778	1-249-430-11	CARBON	12K	5%	1/4W	

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>				
R779	1-249-433-11	CARBON	22K	5%	1/4W	
R780	1-249-431-11	CARBON	15K	5%	1/4W	
R781	1-249-430-11	CARBON	12K	5%	1/4W	
R782	1-249-426-11	CARBON	5.6K	5%	1/4W	
R783	1-249-429-11	CARBON	10K	5%	1/4W	
R784	1-249-433-11	CARBON	22K	5%	1/4W	
R785	1-249-431-11	CARBON	15K	5%	1/4W	
R786	1-249-433-11	CARBON	22K	5%	1/4W	
R787	1-249-458-11	CARBON	8.2	5%	1/4W	
R788	1-247-747-11	CARBON	470	5%	1/2W	
R789	1-249-429-11	CARBON	10K	5%	1/4W	
R790	1-247-694-11	CARBON	33	5%	1/4W	
R795	1-247-901-11	CARBON	820K	5%	1/4W	
R799	1-247-747-11	CARBON	470	5%	1/2W	
R801	1-247-713-11	CARBON	1K	5%	1/4W	
R802	1-247-721-11	CARBON	4.7K	5%	1/4W	
R803	1-249-437-11	CARBON	47K	5%	1/4W	
R804	△.1-212-861-11	FUSIBLE	15	5%	1/4W	F
R901	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R902	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R903	1-216-238-00	METAL GLAZE	47K	5%	1/8W	
R904	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R905	1-216-224-00	METAL GLAZE	12K	5%	1/8W	
R906	1-216-217-00	METAL GLAZE	6.2K	5%	1/8W	
R907	1-216-242-00	METAL GLAZE	68K	5%	1/8W	
R908	1-216-246-00	METAL GLAZE	100K	5%	1/8W	
R909	1-216-246-00	METAL GLAZE	100K	5%	1/8W	
R910	1-216-238-00	METAL GLAZE	47K	5%	1/8W	
R911	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R912	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R913	1-216-150-00	METAL GLAZE	10	5%	1/8W	
R914	1-216-150-00	METAL GLAZE	10	5%	1/8W	
R915	1-216-150-00	METAL GLAZE	10	5%	1/8W	
RV101	1-224-251-XX	RES, ADJ, METAL GLAZE	4.7K(PB LEVEL L)			
RV102	1-224-251-XX	RES, ADJ, METAL GLAZE	4.7K(REC LEVEL L)			
RV103	1-237-459-21	RES, ADJ, CARBON	10K (LEVEL METER L)			
RV201	1-224-251-XX	RES, ADJ, METAL GLAZE	4.7K(PB LEVEL R)			
RV202	1-224-251-XX	RES, ADJ, METAL GLAZE	4.7K(REC LEVEL R)			
RV203	1-237-459-21	RES, ADJ, CARBON	10K (LEVEL METER R)			
RV501	1-230-344-11	RES, VAR, CARBON	20K/20K (REC LEVEL)			
RV502	1-237-389-11	RES, VAR, CARBON	5K/5K (CALIBRATION REC LEVEL)			
RV503	1-237-388-11	RES, VAR, CARBON	20K/20K (PHONE LEVEL)			
RV504	1-226-560-00	RES, VAR, CARBON	5K (CALIBRATION BIAS)			
RV505	1-237-456-11	RES, ADJ, CARBON	1K (NORMAL BIAS I)			

**Note:**  
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>
RV506	1-237-455-11	RES, ADJ, CARBON 500(NORMAL BIAS IV)
RV701	1-228-990-00	RES, ADJ, CARBON 1K (FWD TORQUE)
RY501	1-515-614-11	RELAY (LINE MUTE)
S501	1-554-338-00	SWITCH, LEVER SLIDE (MONITOR)
S502	1-571-092-11	SWITCH, PUSH (4 KEY) (DOLBY NR, MPX FILTER)
S701	1-554-303-21	SWITCH, KEY BOARD (■)
S702	1-554-303-21	SWITCH, KEY BOARD (◀)
S703	1-554-303-21	SWITCH, KEY BOARD (▶)
S704	1-554-303-21	SWITCH, KEY BOARD (REC ●)
S705	1-554-303-21	SWITCH, KEY BOARD (▶)
S706	1-554-303-21	SWITCH, KEY BOARD (PAUSE ■)
S707	1-554-303-21	SWITCH, KEY BOARD (REC MUTE ●)
S708	1-554-303-21	SWITCH, KEY BOARD (COUNTER RESET)
S709	1-554-303-21	SWITCH, KEY BOARD (COUNTER MEMORY)
S710	1-516-781-XX	SWITCH, ROTARY (TIMER)
S801 Δ	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)
S802 Δ	1-570-307-11	(E)...SWITCH, VOLTAGE CHANGE
S1001	1-554-205-00	SWITCH, PUSH (ERASE PROOF)
S1002	1-554-205-00	SWITCH, PUSH (HALF DET)
S1003	1-554-205-00	SWITCH, PUSH (LOCK DET)
S1004	1-554-205-00	SWITCH, PUSH (METAL)
S1005	1-554-205-00	SWITCH, PUSH (CrO2)
TH501	1-800-200-00	THERMISTOR S-3K
THP501Δ	1-202-856-00	SOLID 22 1/4W F
X701	1-567-160-00	OSCILLATOR, CERAMIC (4.19MHz)
X702	1-527-532-00	OSCILLATOR, CERAMIC (400KHz)
X703	1-567-731-11	VIBRATOR, CRYSTAL (10.5MHz)

ACCESSORY & PACKING MATERIAL

1-465-104-11	(UK)...REMOTE COMMANDER (RM-J600)
1-551-734-11	CORD, CONNECTION (RK-74A)
*3-318-684-01	CUSHION
*3-350-429-01	(US,Canadian,AEP)...INDIVIDUAL CARTON
*3-350-429-11	(E).....INDIVIDUAL CARTON
*3-350-437-01	(UK).....INDIVIDUAL CARTON
3-701-630-00	BAG, POLYETHYLENE
3-703-450-01	(US)...INSTRUCTION
3-786-746-21	(US,Canadian,UK,E)...MANUAL, INSTRUCTION
3-786-746-41	(AEP).....MANUAL, INSTRUCTION
3-786-746-51	(Canadian,AEP).....MANUAL, INSTRUCTION
3-793-481-13	INSTRUCTION
4-384-285-01	(UK)...COVER, BATTERY
4-820-330-31	(EXCEPT UK)...SCREW, BW, PLUS MINUS

**Note:**  
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Replace only with part number specified.

**Note:**  
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Ne les remplacer que par une pièce portant le numéro spécifié.

**TC-K333ESR/K730ES**

**9-953-769-11**

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Audio Group**

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